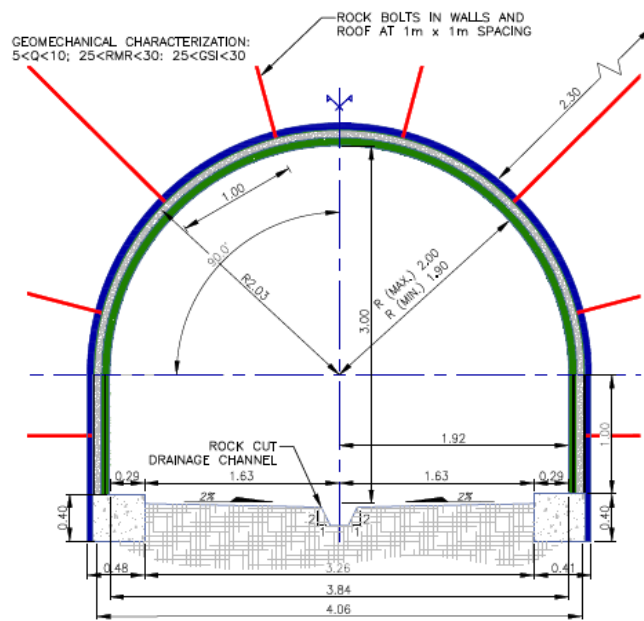
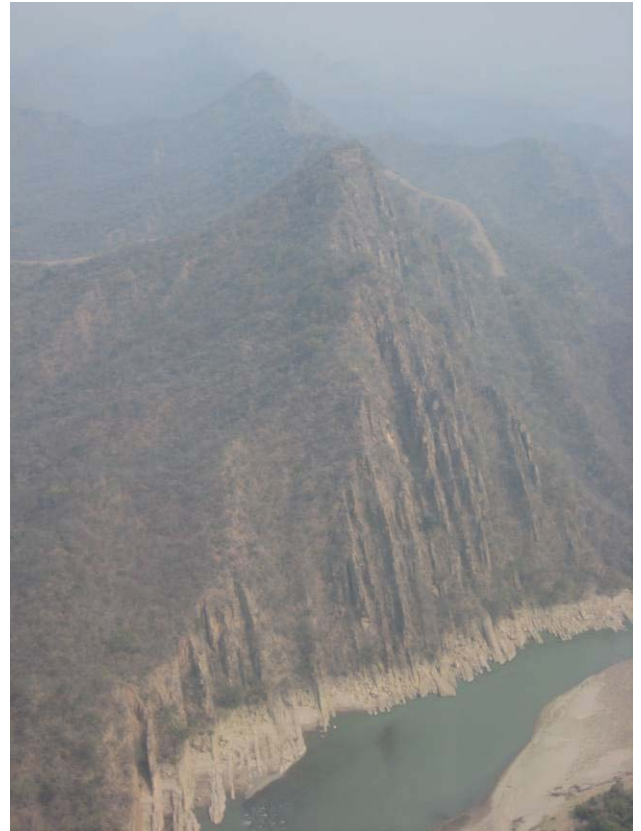


TITLE AND LOCATION (CITY AND STATE) MARGARITA EXPORT LINE TUNNEL TARIJA, BOLIVIA		YEAR COMPLETED
		PROFESSIONAL SERVICES 2010
PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER REPSOL YPF E&P BOLIVIA S.A.	b. POINT OF CONTACT NAME Sofia Bullón	c. POINT OF CONTACT TELEPHONE NUMBER 591-333-84118

RIZZO personnel recently completed the design and bid documents for a 1.75km-long, 3m diameter hard-rock tunnel through the sub-Andes in Southern Bolivia for Repsol YPF. The site is located in a remote area of Bolivia, currently accessible only by helicopter. A planned pipeline, traveling through the Margarita Export Line Tunnel, would provide an important link for delivering additional natural gas volumes to the Bolivian, Brazilian, and Argentinean markets.

RIZZO provided a comprehensive suite of services for the project including design of the tunnel, tunnel portals, bench areas, initial and final support systems, excavation system, and work camp. Additionally, RIZZO developed the Geotechnical Data Collection Plan; Project Execution Plan; Project Quality Plan; Health, Safety, and Environmental Plan; Construction Sequencing Plan; determined the availability of tunnel excavation equipment; developed commercial and technical specifications; and assisted Repsol with the prequalification of tunneling contractors for construction of the tunnel.

The Margarita Export Line Tunnel Project was a collaborative effort between our Pittsburgh and South American offices. Two major challenges associated with this Project included site access and document transfer, as the documents had to transfer across two continents in two different languages and adhere to the aggressive design schedules.



TYPICAL SUPPORT TS4
SCALE 1:25

