

CONSULTING
ENGINEERS
OF ALBERTA
LEADERS IN MOTION



SHOWCASE
2001
AN ENGINEERING
ODYSSEY

Award of Merit
Small Firm
Award of Merit
International

Argentina to Chile Gas Pipeline Argentina & Chile

Firm: Hydroconsult EN3 Services Ltd.

Client: GasAtacama

Other Key Players: Fluor Daniel Williams Brothers — Project Manager
Vector Argentina — Environmental
Contreras Ute — Contractor

How do you build and operate a 940 km long, 24 inch gas pipeline that reaches a world record elevation of 5032 m in its routing from Argentina to Chile? When the only feasible routing into the high Andes is via narrow river valleys, how do you minimize impacts on the native villages and farms that cling to the only available flat areas?

These were the challenges faced by GasAtacama (owner) and Fluor Daniel Williams Brothers (Project Manager), when they engaged Hydroconsult in late 1997. Hydroconsult developed economic, safe and practical instream designs, provided full-time construction inspection for specialized river training structures (23,000 m in total length), and is now assisting the owner in annual and post-flood operational monitoring.

The instream alignment, unconventional in many respects, provided significant benefits and reduced impacts on the residents and farms in the valley, enhanced safety by maximizing the setback of people to the gas line, and last but not least, maximized local labour content in a high unemployment region for the construction of specialized river training structures.



CEA 2001
Showcase Awards

Judges' Comments:

"An outstanding example of innovation under difficult conditions."

"This project demonstrates a superb use of the art and technology of hydraulic engineering together with considerable innovation to design, construct, inspect and monitor a gas pipeline through difficult terrain and under unusual environmental conditions."



Hydroconsult