Development of an Integrated Exploitation Plan for a Latin American National Oil Company

CHALLENGE

A Latin American national oil company requested the development of an integrated exploitation plan for a tight-gas asset.

- To develop a plan using front end loading (FEL) methodology that generates maximum reserve with minimum capital-expenditure investment.
- To develop a subsurface strategy that reorganized facilities with incremental capacities and reduce bottlenecks.

SOLUTIONS

A multi-disciplinary consulting team developed an exploitation plan using three phases of the FEL methodology to do the following:

- Identify exploration opportunities for the field.
- Evaluate uncertainties and the decision-scenario optimization (DSO) process.
- Deliver an engineering design.
- Pilot project on well architecture
- Incorporate new stimulation technology.
- Develop an engineering design for the well and facilities.

RESULTS

- The study led to timely budget approval to initiate the exploitation plan.
- The client adopted the approach as a framework for planning and design.
- The plan created the first project in the country in which all FEL phases were accomplished.
- The approach yielded a 40% increase in production.