

Recent Advances in Characterization and Strategies for Profitability Improvement: Estación Fernández Oro Tight Gas & Condensate Field, Neuquén Basin

P. Alencastre¹, P. Conte¹, M. García¹, Nayibe Otalora¹, G. Potas¹, and G. Serrano¹

¹ YPF

ABSTRACT

The Estación Fernández Oro (EFO) Tight Gas & Condensate field, operated by YPF since the beginning of last year, is currently the third largest field that the company produces from a tight gas formation. Several development field improvements were successfully implemented since the takeover due to the experience gained by YPF operating other tight gas fields in the same basin. The main topics covered in this presentation are:

- Lajas Formation Conceptual Geological Model Definition: Looking for reservoir bodies distribution
- The structural model and its relationship with hydrocarbon charge and fluid distribution
- PVT characterization that helped to explain GOR differences between zones, confirming that all wells are producing within the gas condensate window, and chromatographic relationships that enabled pay zone identification and fluid characterization along the well
- Well production enhancement that has been achieved by improving choke and gathering management and well spacing that was optimized based on hydraulic fracturing, microseismic mapping, and image logs
- The use of different logging technologies and strategies looking for well cost optimization