

Las Tacanas Norte

Introduction

The block is located in the central area of the Neuquén Basin. It covers an area of 119.75 km². The following map shows its location, wells drilled, access roads and waterways.

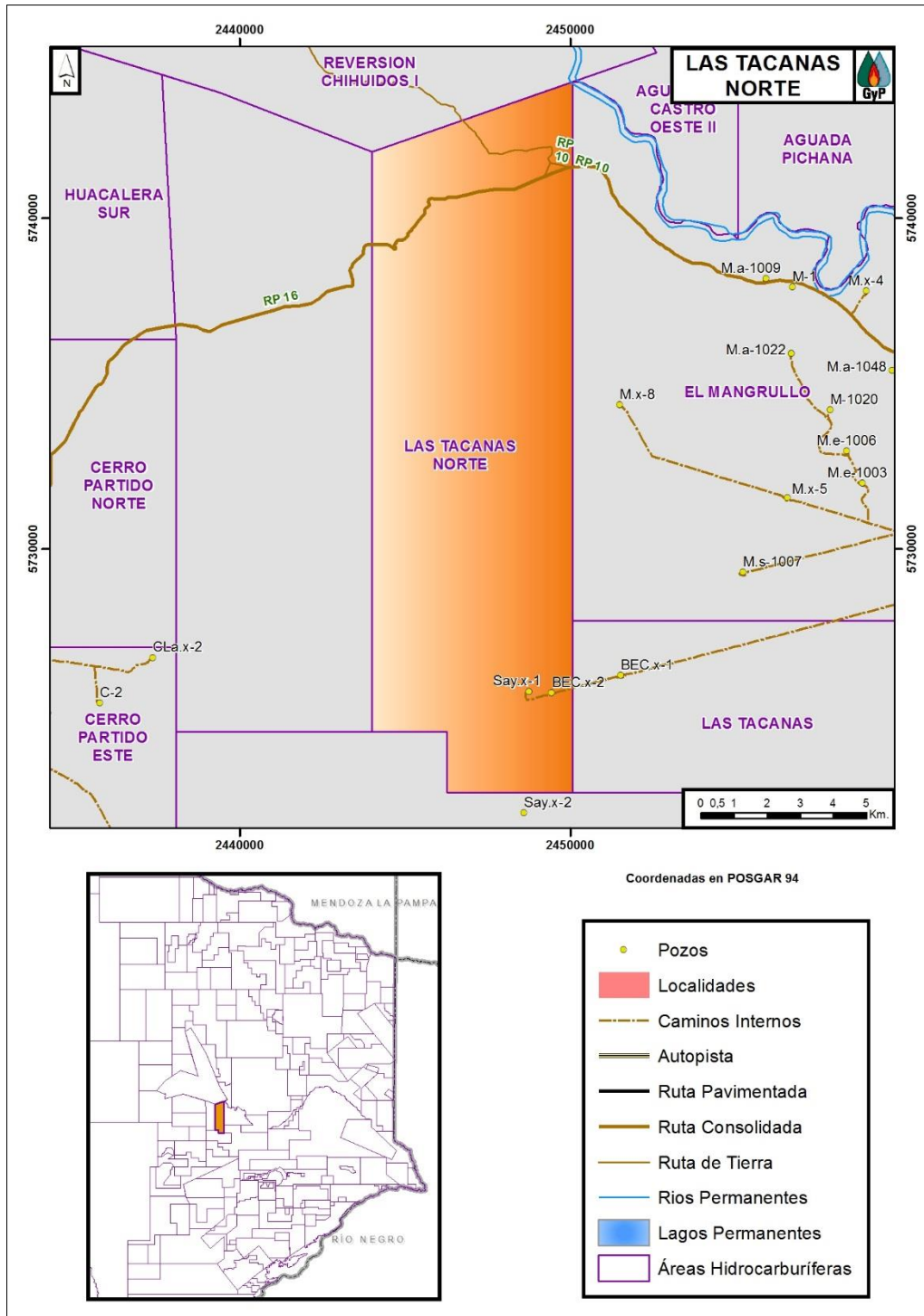


Figure 1.Location

Wells

There are 2 wells drilled in the area.

| Well | Name | TD (m) | Reached Fm. | Prod. Fm. | Year | Current State |
|----------------|-----------------------|--------|-------------|------------------|------|---------------|
| YPF.Nq.BEC.x-2 | Bajo El Chicalito x-2 | 1,795 | Quintuco | Gr. Precuyo | 1996 | A |
| CSJ.Nq.Say.x-1 | Sayhueque x-1 | 1,703 | Quintuco | Agrio-Mulichinco | 2005 | A |

Table 1. Wells in the area.

Seismic coverage

The area has 2D and 3D seismic coverage in the southern section of the block, as shown in the following figure.

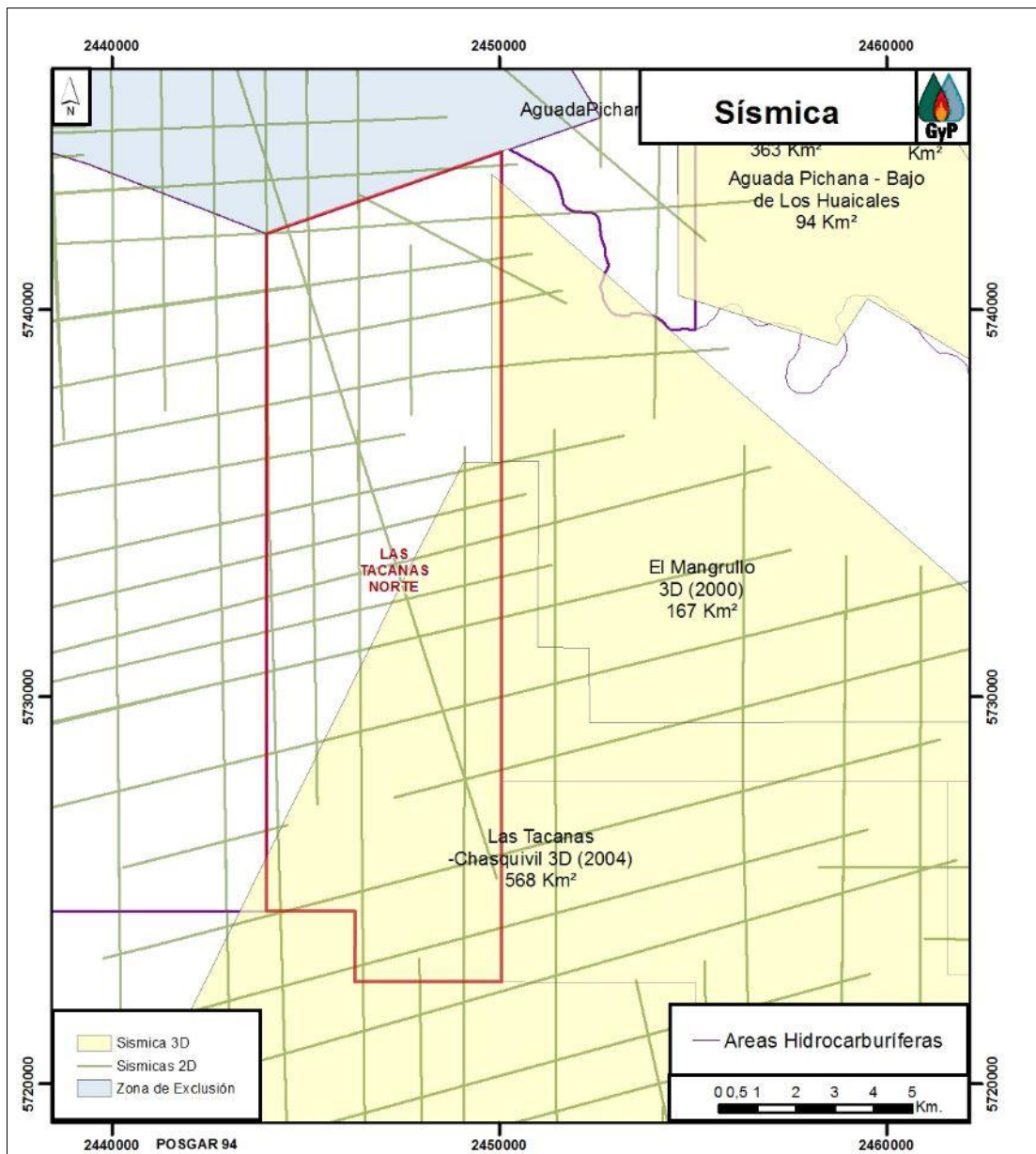


Figure 2. Seismic coverage

Information available in GyP

| DISPONIBLE EN GyP | | | |
|-------------------|----------|--------------------|-------------------------------------|
| Legajos | Perfiles | Líneas Sísmicas 2D | Sísmicas 3D Nombre |
| 2 | 2 | 21 | Las Tacanas - Chasquivil (2004)_LTN |

Table 2.Las Tacanas Norte

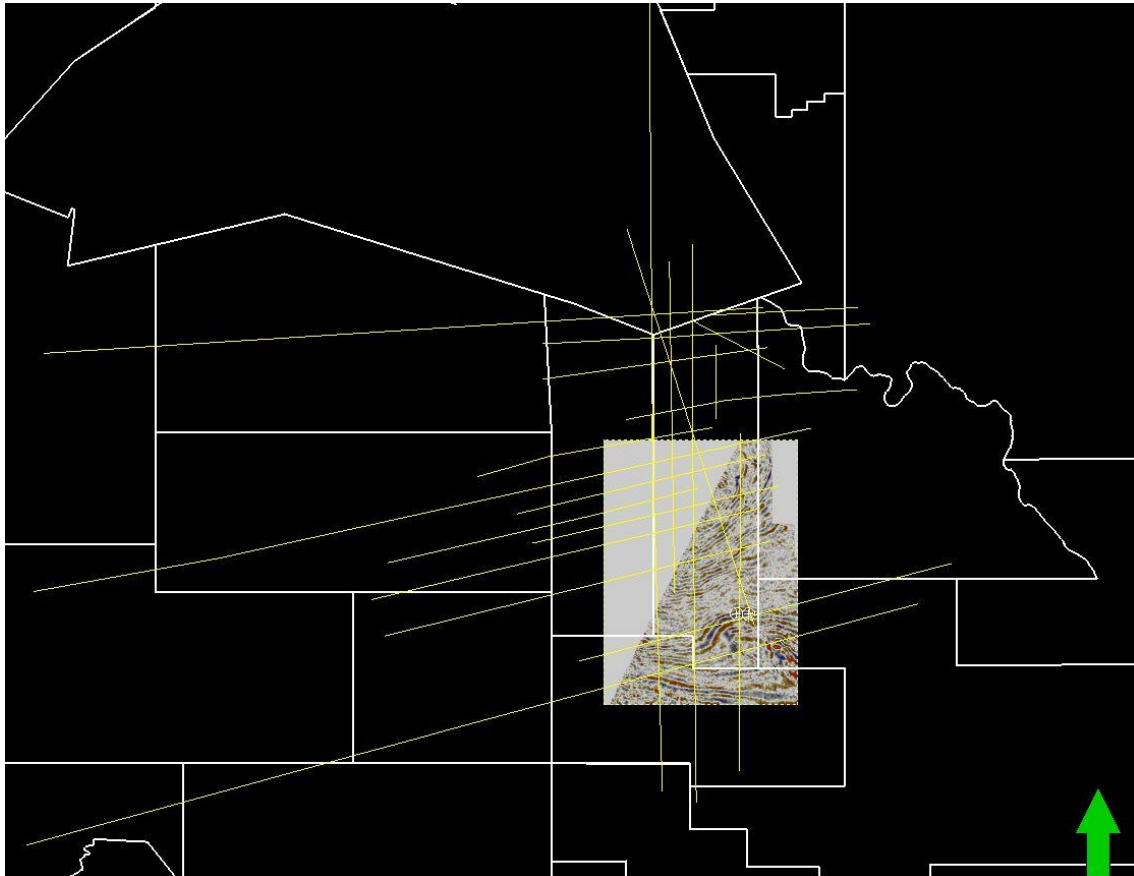


Figure 3.2D Seismic information.

Potential in conventional reservoirs

Petroleum System

The petroleum system in this zone of the basin is conformed by:

Source rock: Vaca Muerta and Los Molles Fms.

Reservoirs: Agrio, Mulichinco, Tordillo Fms. and Lotena and Cuyo Gps.

The main exploratory risk is associated with trapping and reservoir quality.

The block is considered of moderate risk for conventional reservoirs.

Background

CSJ.Nq.Say.x-1: TD 1703 m, Fm. Quintuco. Gas was tested in the Agrio Fm., (10,000 m³/d, post frac. 32,600 m³/d) and Mulichinco Fm., (22,200 m³/d, post frac. 18,000 m³/d).

YPF.Nq.BEC.x-2: TD 1795 m. No data available, currently abandoned.

The area is adjacent to El Mangrullo Reservoir, gas producer of the Agrio and Mulichinco Fms. In Las Tacanas area, to the south, gas production of the Mulichinco Fm. was documented.

Potential in unconventional reservoirs

The subsurface parameters used to characterize the Vaca Muerta Fm. are summarized as follows:

TOC (% average total organic content): 3%.

Reflectance to vitrinite (thermal maturity, % Ro average):> 1.6%.

Net Thickness (TOC> 2%): 150 m.

Presence of faults: No.

Overpressure: Yes.

Production history: No.

Vaca Muerta Fm. base depth: 3,000 m

Figure 4 summarizes the aforementioned parameters that allow to visualize the unconventional potential (shale) of the block in a regional context.

Background

In the neighboring area, Las Tacanas, the well YPF.Nq.LTac.x-1 documented important gas productions from the Vaca Muerta Fm. (unconventional).

According to Chapter. IV, the well accumulated, 26.76 m³ of oil and 624 Mm³ of gas in 23 days of test. The well YPF.Nq.LTac.x-2, is in production of gas and condensate of the same formation.

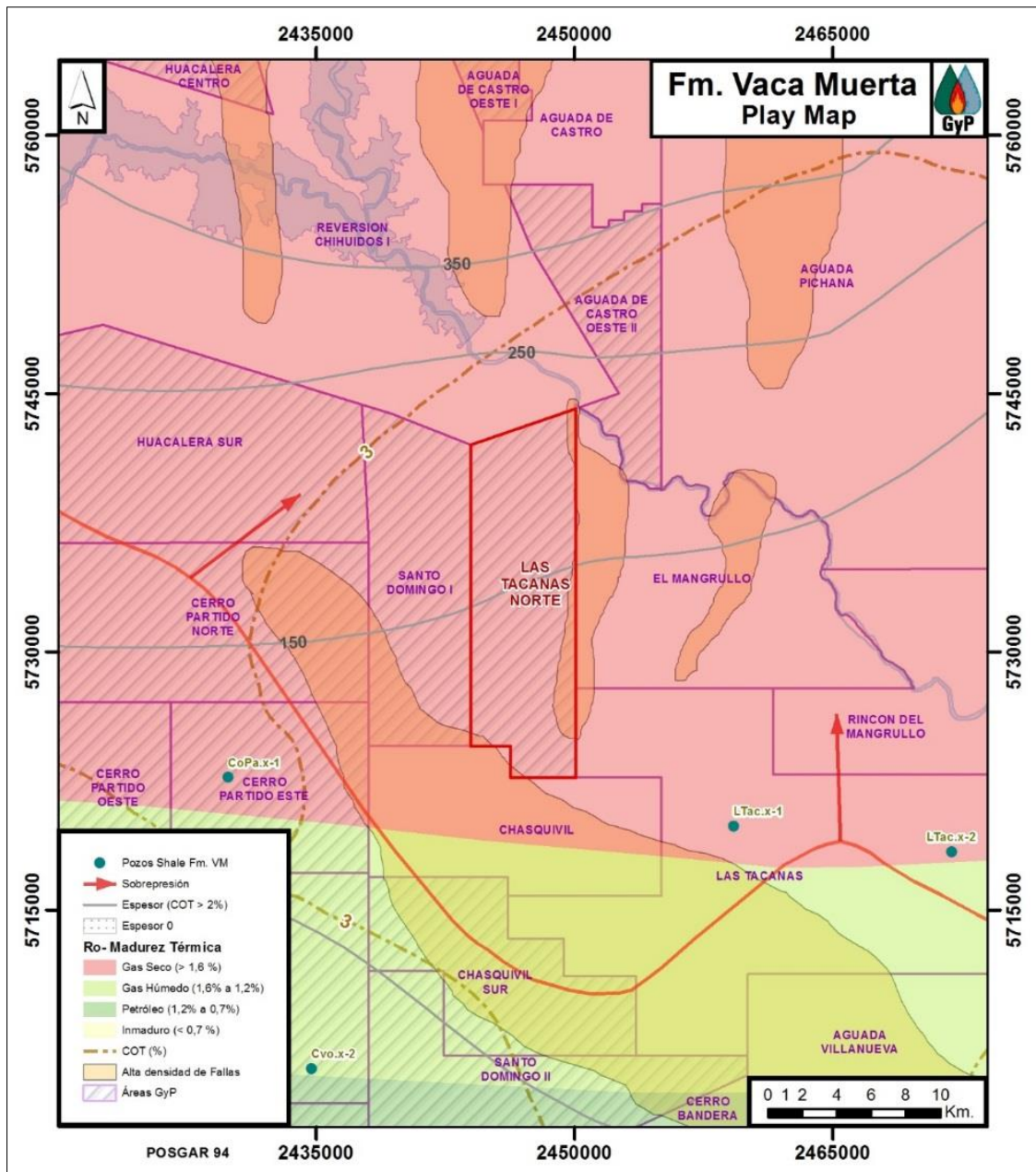


Figure 4. Vaca Muerta Fm. Play Map

Conclusions

The area has high potential for the Vaca Muerta Fm. as unconventional reservoir in gas window. The potential of tight sands for the Agrío, Mulichinco and Tordillo Fms. is not ruled out.

For conventional reservoirs it is a block of moderate exploratory risk. The challenge is to explore incorporating all the information of subsurface that allows to elaborate new prospective models.