Parva Negra Oeste

Introduction

The block is located in the northern area of the Dorso de los Chihuidos in the central-western zone of the Neuquén basin. It covers an area of 143 km^2.

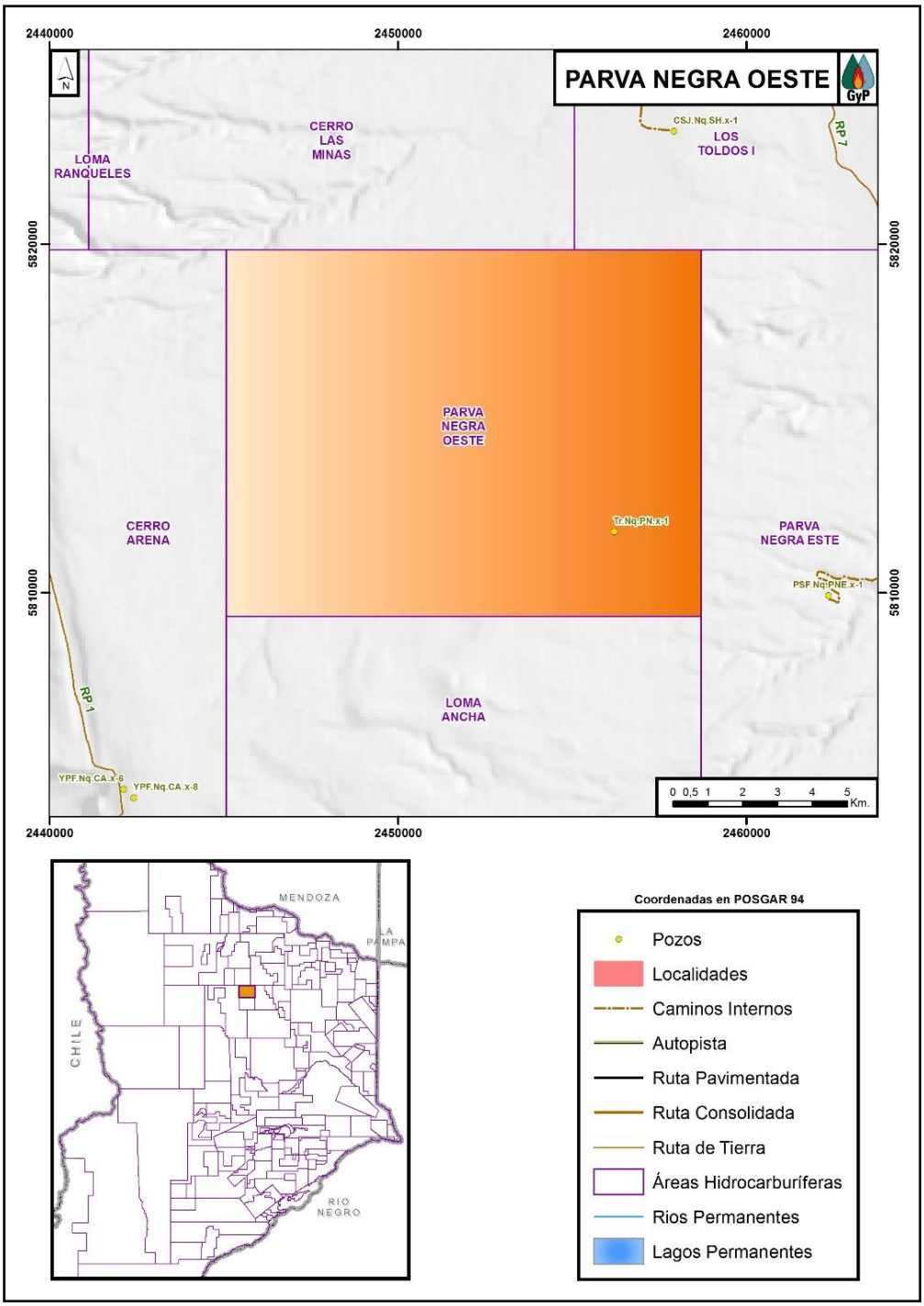

Figure 1. Location

Wells

There is one well in the area

POZO	NOMBRE	Prof. Final (m)	Fm. Alcanzada	Fm. Prod.	Año	Estado
Tr.Nq.PN.x-1	Parva Negra x-1	1763	Mulichinco	Troncoso Inf.	1991	-

Table 1. Well in the area.

Seismic coverage

The area has 3D seismic coverage in the eastern sector and 2D in the western sector, as shown in the following figure.

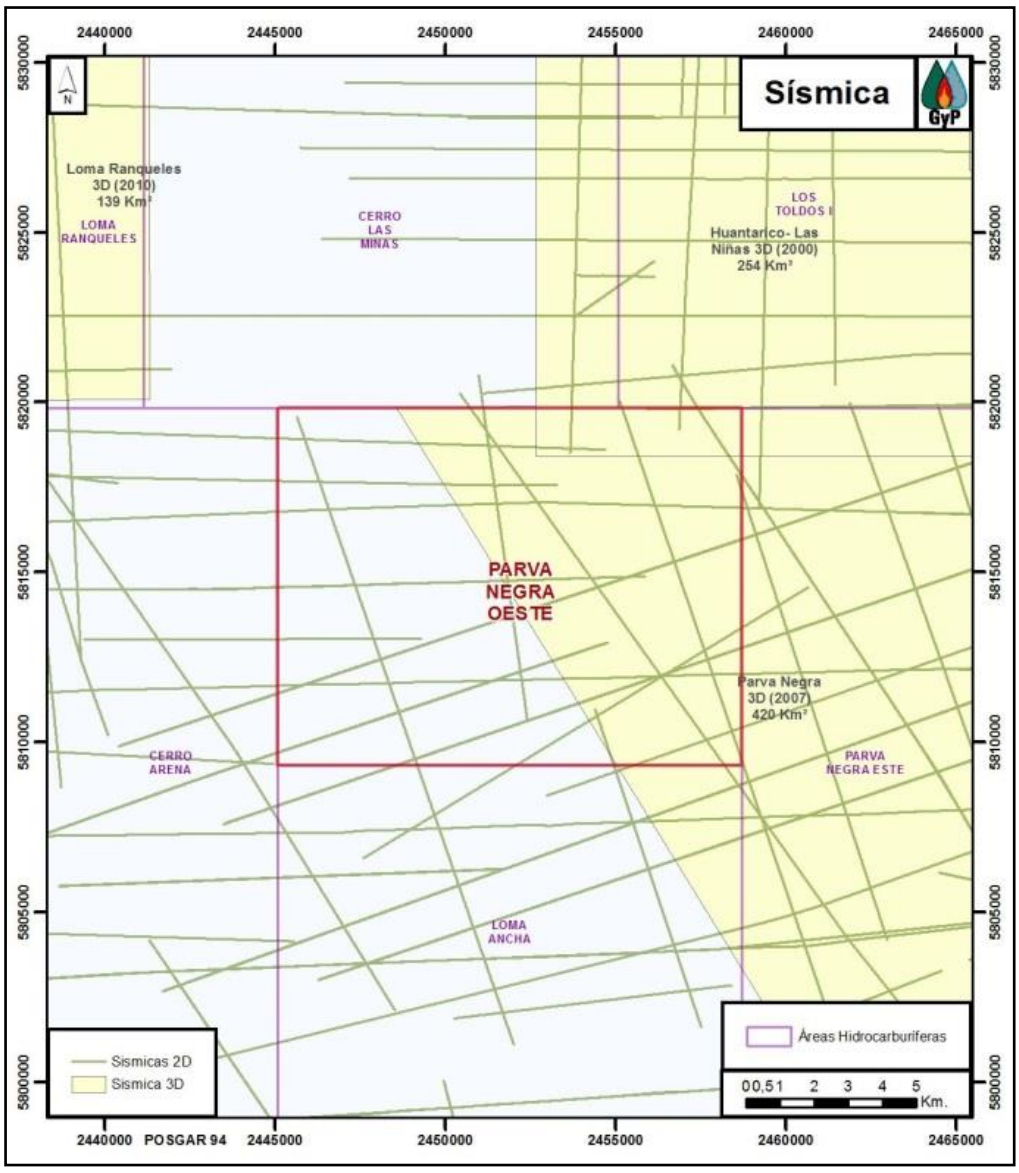

Figure 2. Seismic coverage

Information available in GyP

DISPONIBLE EN GyP			
Legajos	**Perfiles**	**Líneas Sísmicas 2D**	**Sísmicas 3D Nombre**
1	1	17	Parva Negra (2007)_PNO

Table 2. Information available

There is information from the well Tr.Nq.PN.x-1. The interval from 1460 to 1763 m (TD), was not logged because part of the survey was left in fishing.

The 3D seismic cube corresponds to a PSTM processing.

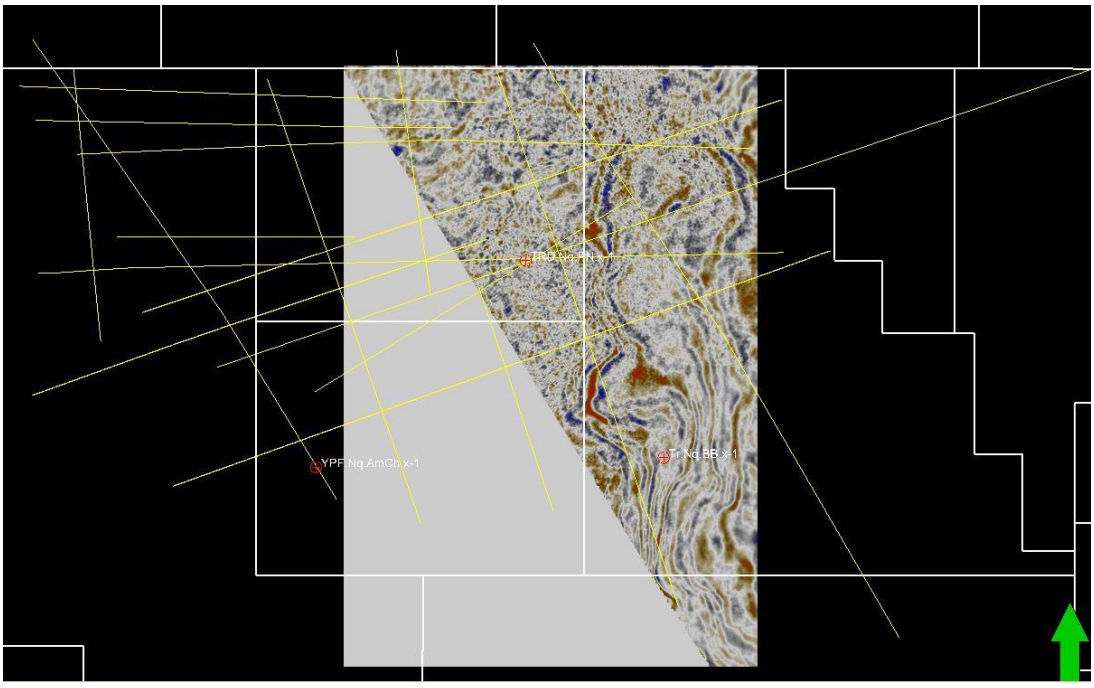

Figure 3. 2D and 3D seismic information

Potential in conventional reservoirs

Petroleum system

Source Rocks: Vaca Muerta and Los Molles Fms. (3,500 m depth).

Reservoirs: Lower Troncoso, Agrio, Mulichinco and Tordillo Mbs..

For conventional reservoirs it is a moderate risk block. The main risk is associated with reservoir quality and seal.

Background

There is a well drilled in the block and a history of gas testing in neighboring blocks:

Tr.Ng.PN.x-1: TD at 1,763 m. in the Mulichinco Fm. Producer of the Lower Troncoso Mb, with 40 km^3/d of gas with 50% CO_2.

YPF.Ng.AmCh.x-1: TD at 4,100 m in the Pre Cuyo Gp. La Manga and Lotena Fms. tested gas with CO_2 (75%). The Tordillo Fm. tested gas with CO_2 (4%).

PSF.Ng.PNE.x-1: TD at 2,064 m in Mulichinco Fm. Mulichinco Fm. produced 35km^3/d of gas with CO_2.

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%): 250 m.

Presence of faults: Yes.

Overpressure: Yes.

Production history: No.

Vaca Muerta Fm. base depth: 2,900 m

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

Background

In the neighboring areas Cerro las Minas, Los Toldos I, Pampa de las Yeguas I and II, Sierra Chata and Cerro Arena, gas production was proven from the Vaca Muerta Fm. (shale).

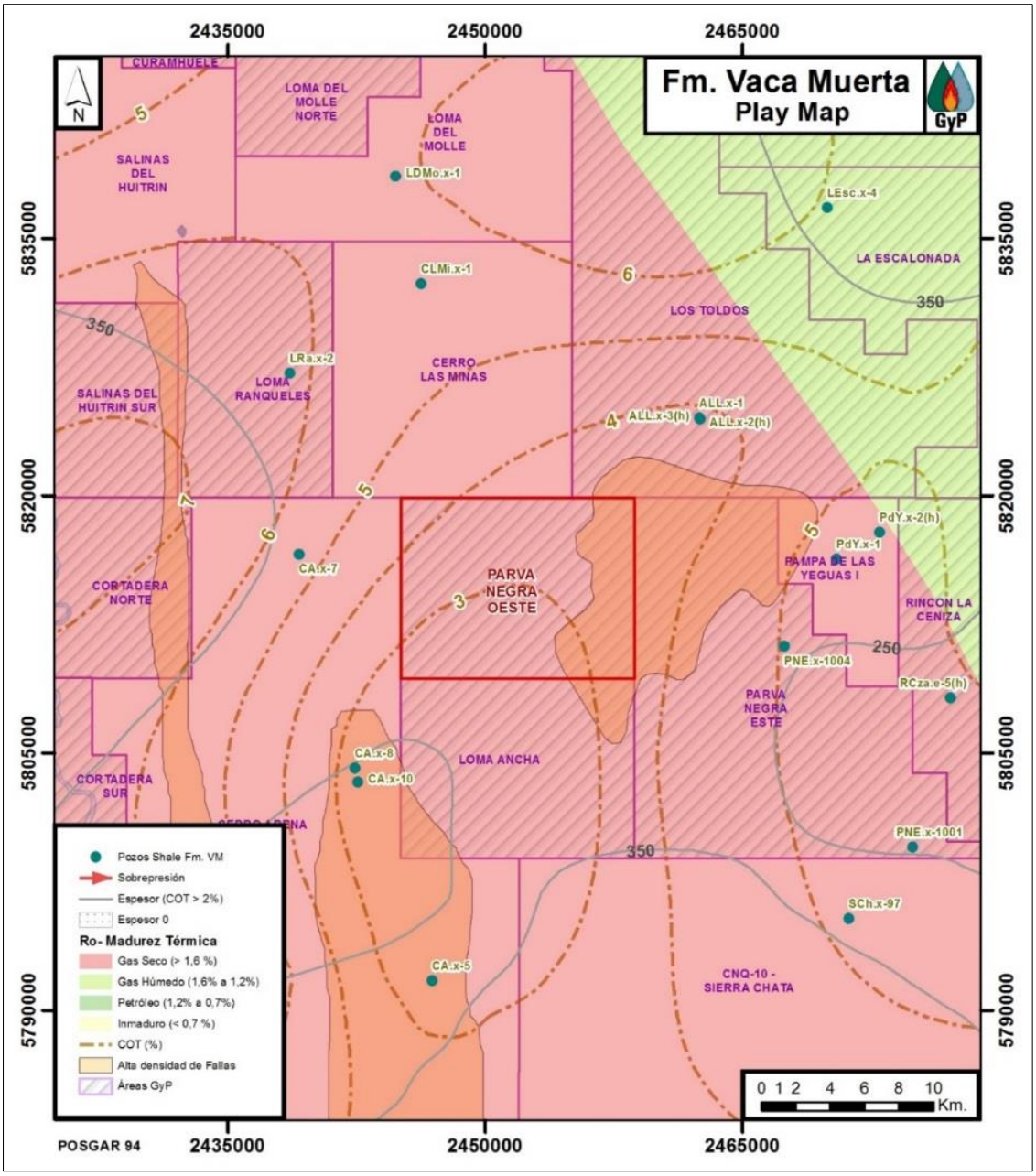

Figure 4. Vaca Muerta Fm. Play Map

Conclusions

The Parva Negra Oeste area has high exploratory potential for the Vaca Muerta Fm.in dry gas window.

For conventional reservoirs it is a block of moderate exploratory risk. The northeast sector of the block has a significant density of fractures that affect different levels constituting a possible exploratory play.