

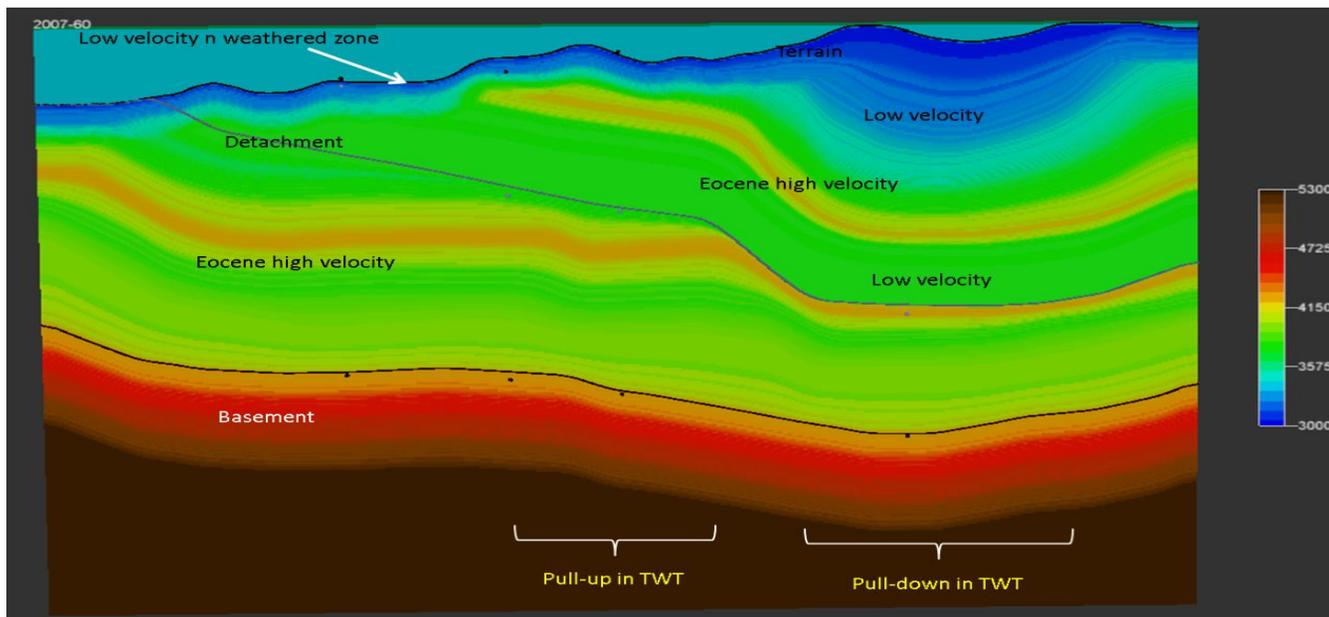
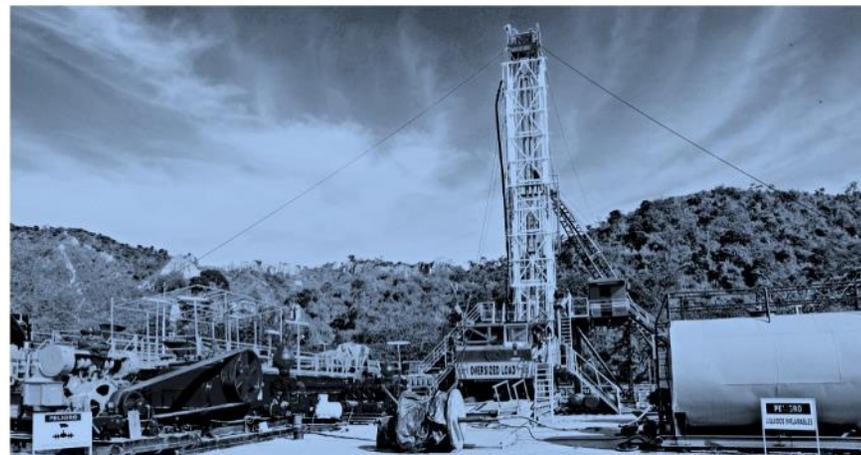
# New Stratus Energy Inc

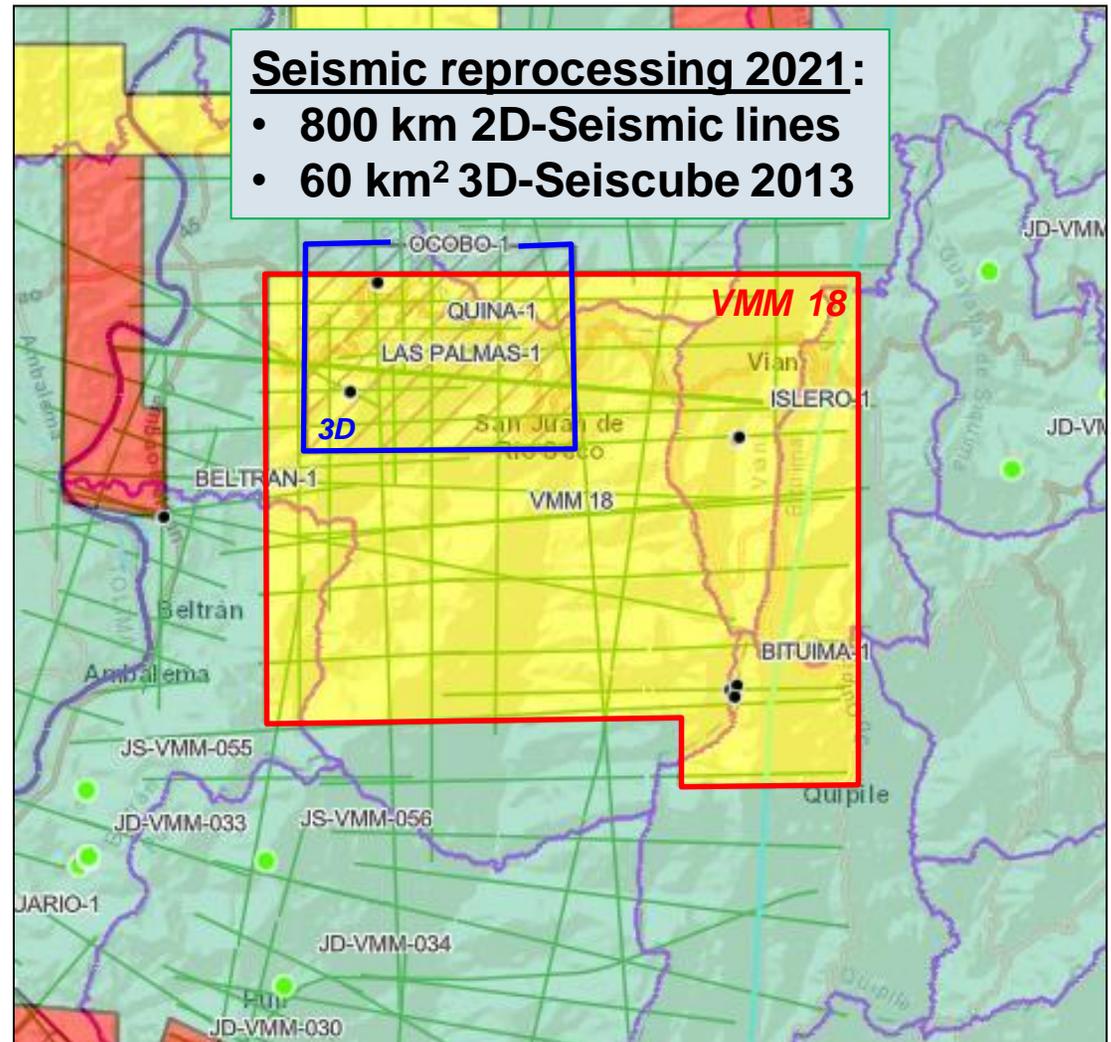
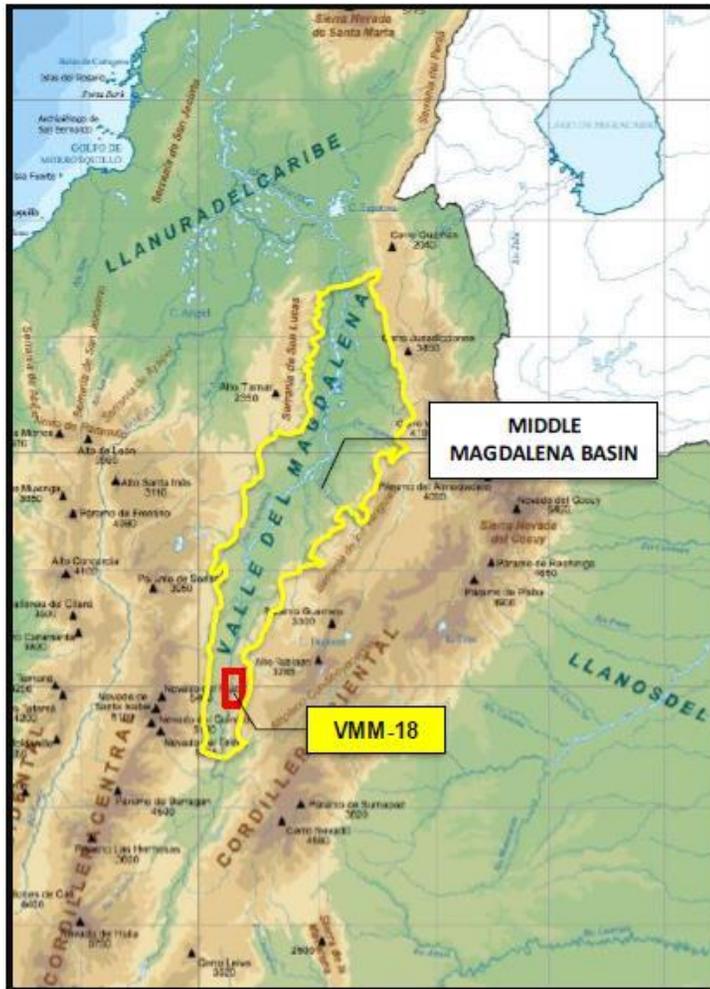
Colombia - VMM 18 Block

Corporate Technical Presentation

## 2D & 3D Reprocessing & Reinterpretation - Update

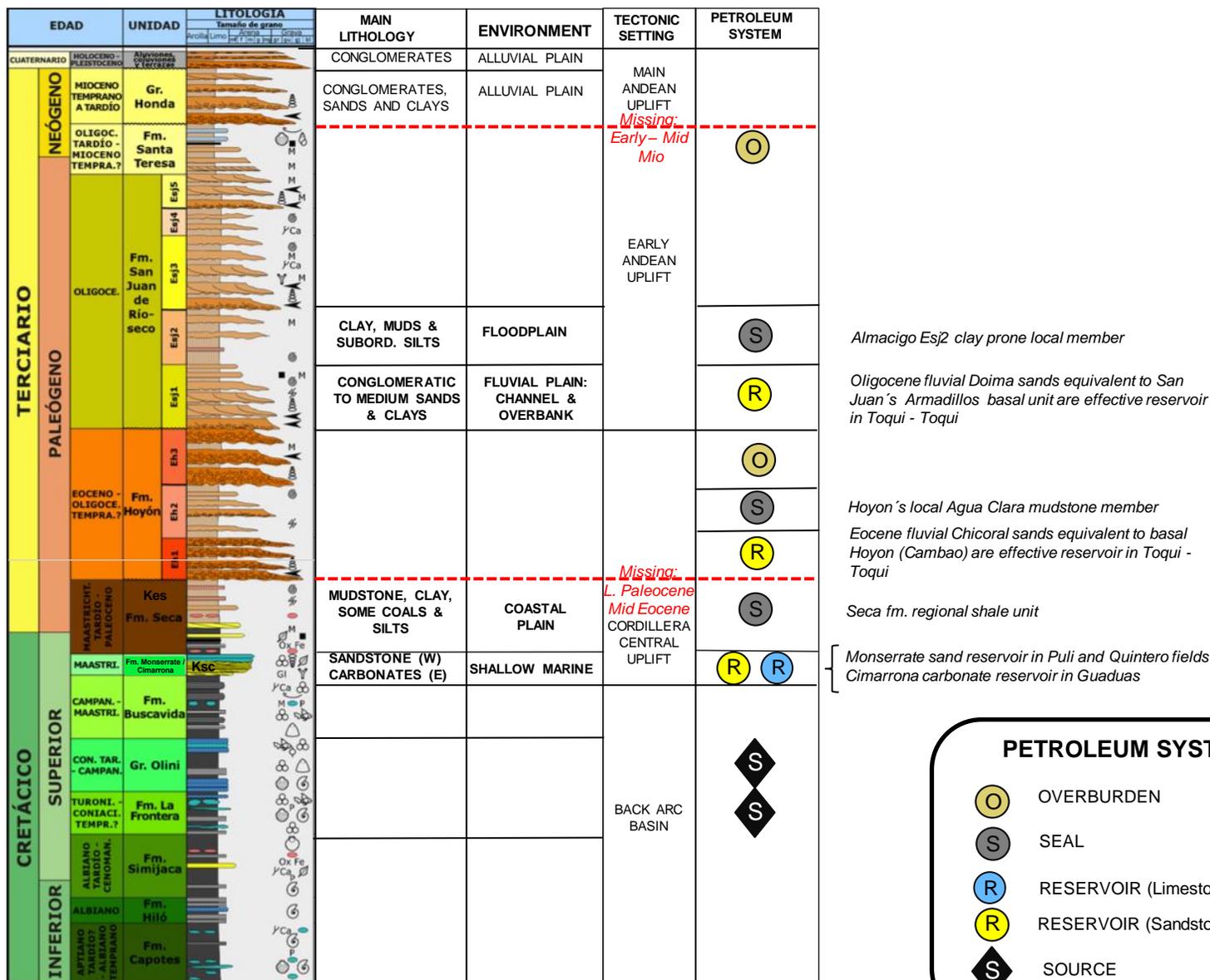
July 2022





**Seismic reprocessing 2021:**

- 800 km 2D-Seismic lines
- 60 km<sup>2</sup> 3D-Seiscube 2013

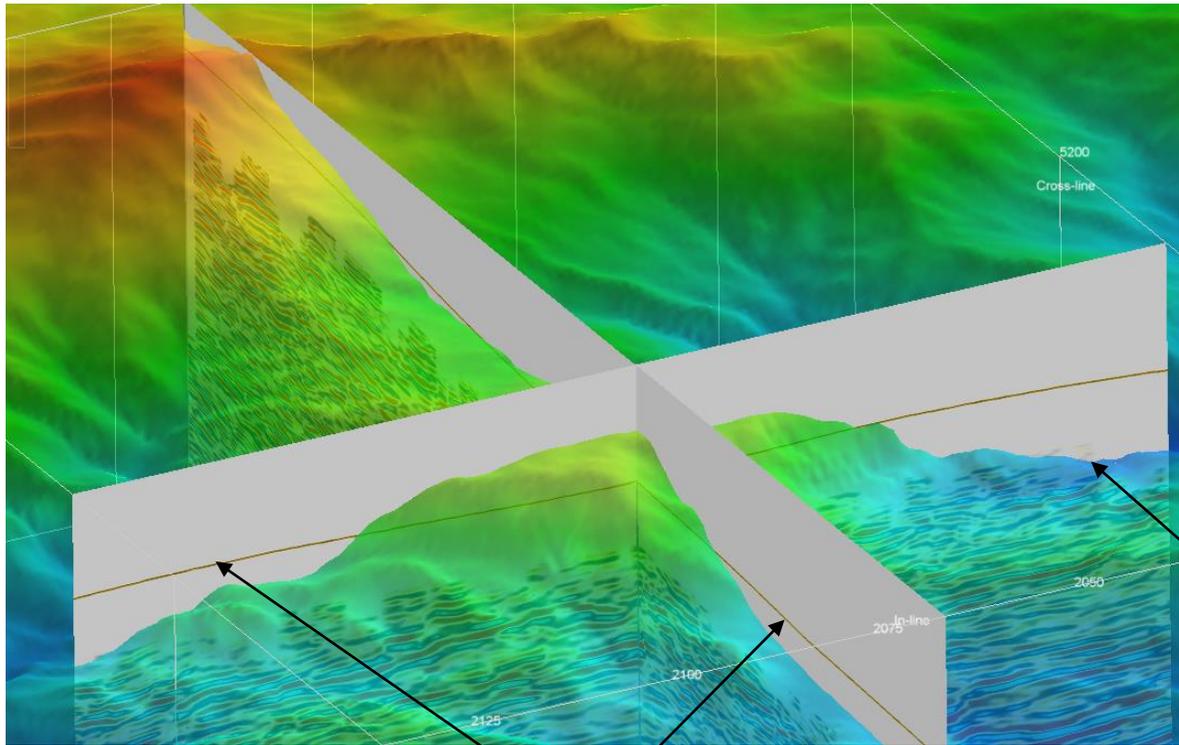


**PETROLEUM SYSTEM**

- OVERBURDEN
- SEAL
- RESERVOIR (Limestone)
- RESERVOIR (Sandstone)
- S SOURCE

Modified from: Manrique, J., Amézquita, C. et al. (2014)



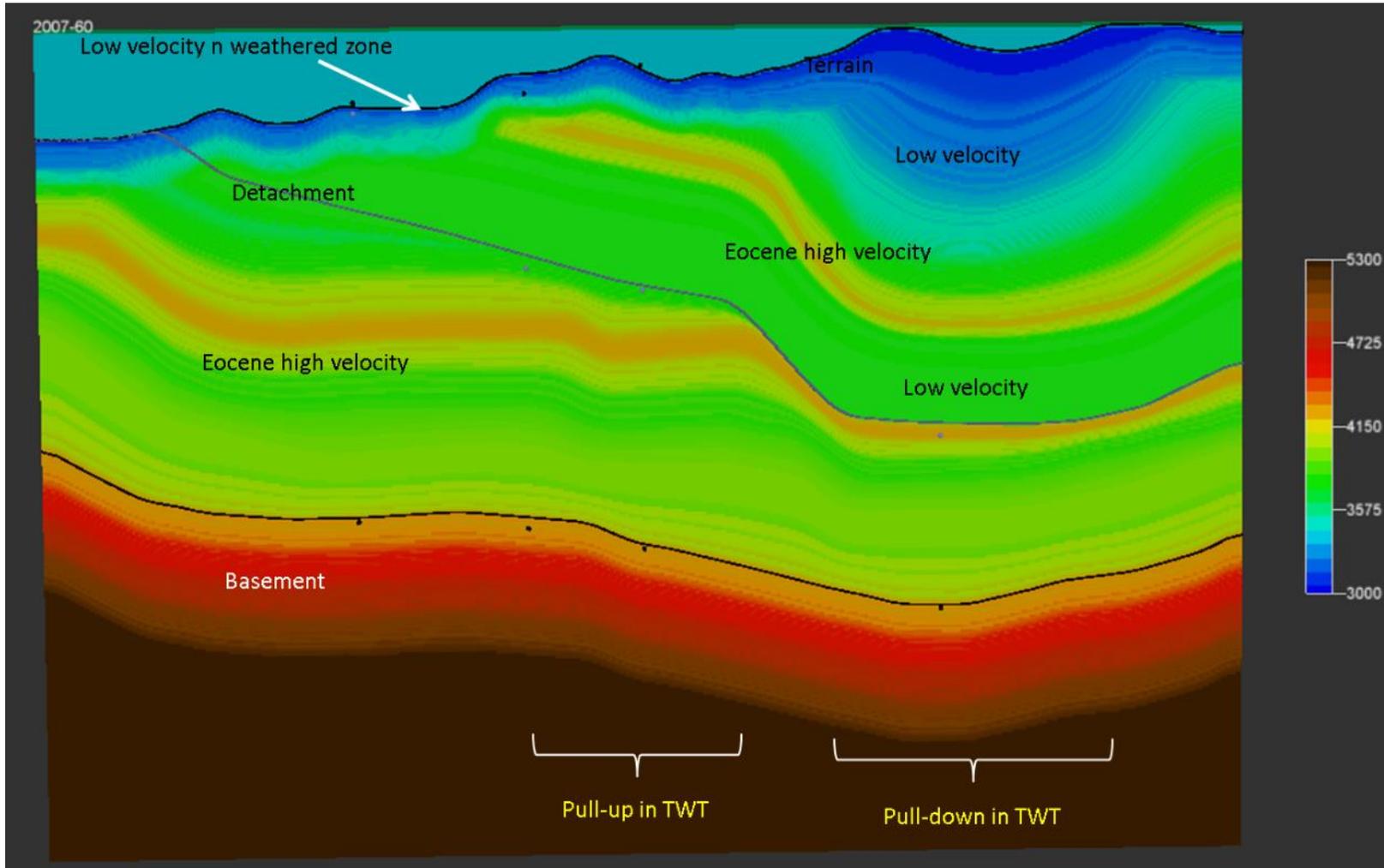


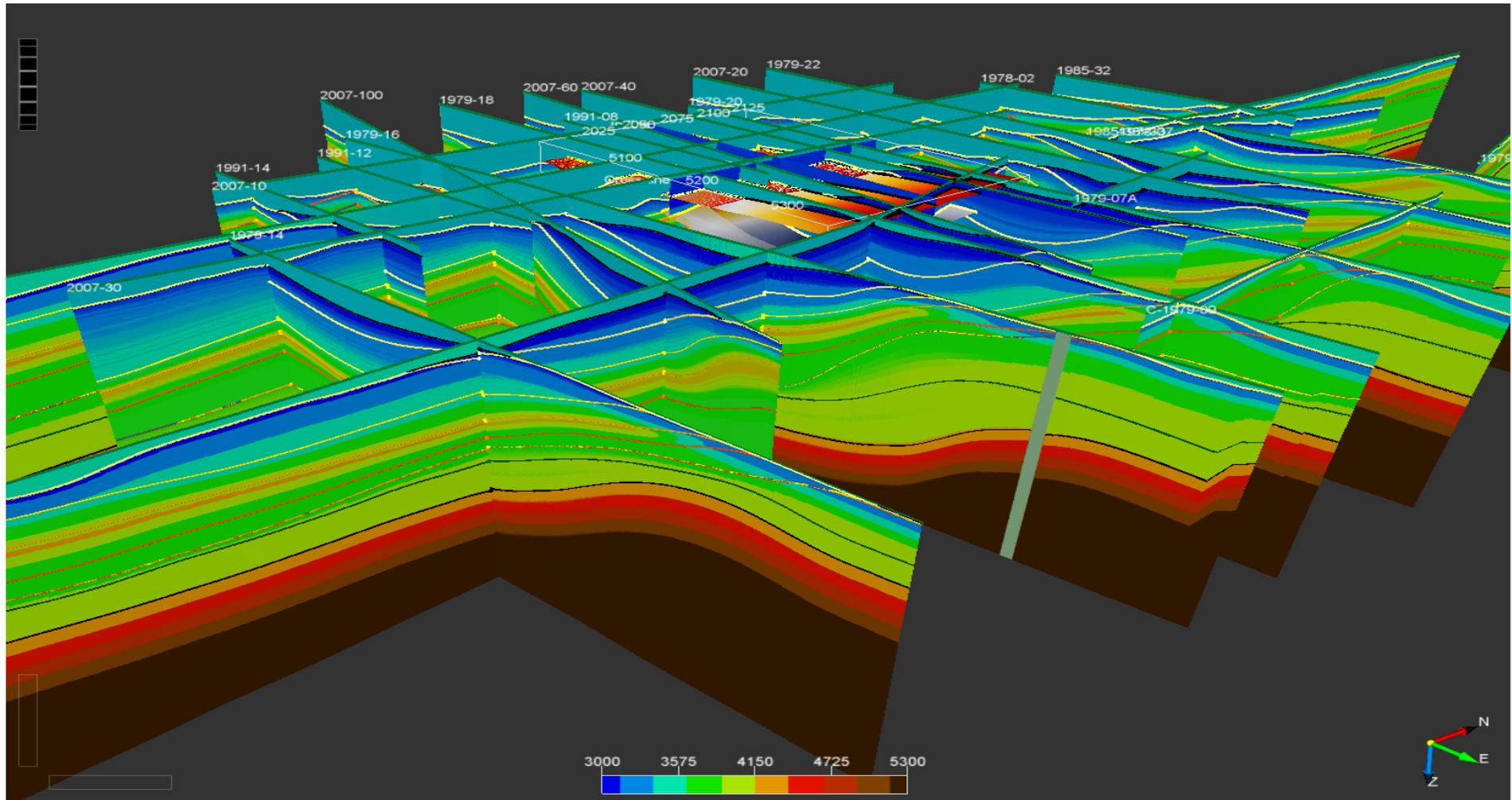
Terrain elevations in the 3D cube show two problems:

- The surface elevation profile was exaggeratedly smoothed for seismic processing
- There is an average downward shift of the actual elevation map

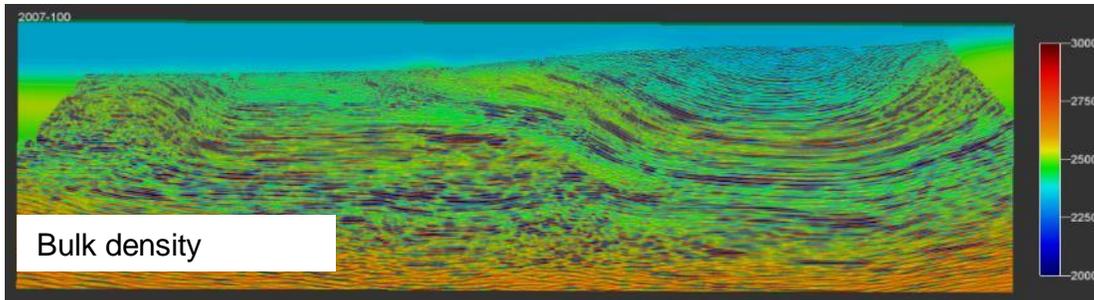
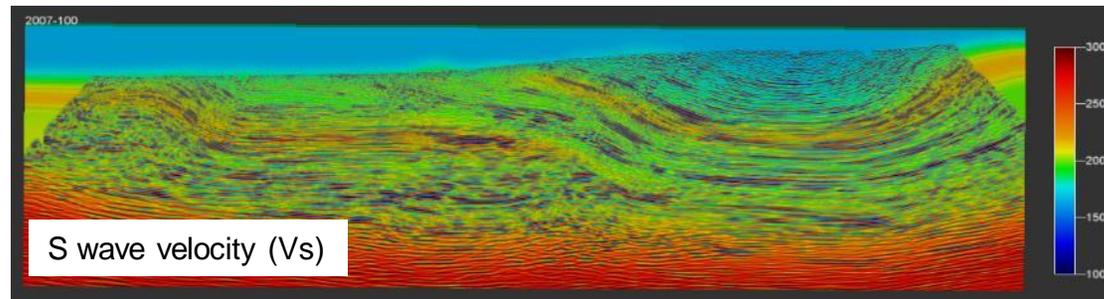
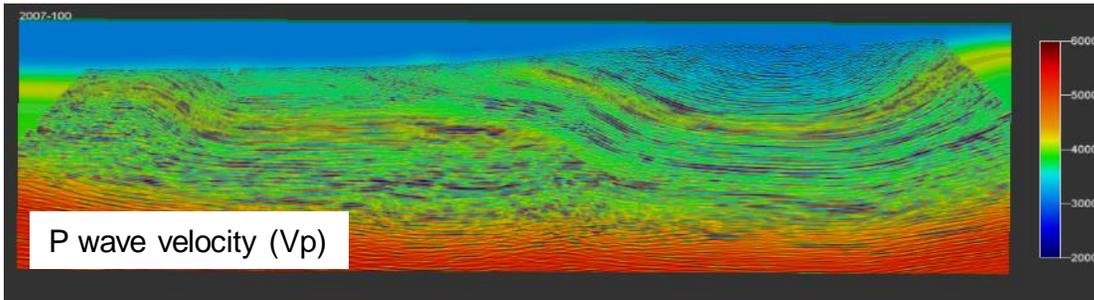
On average the true elevations are displaced down from respect to the used in the processing

Surface elevation is very smoothed compared to the real one





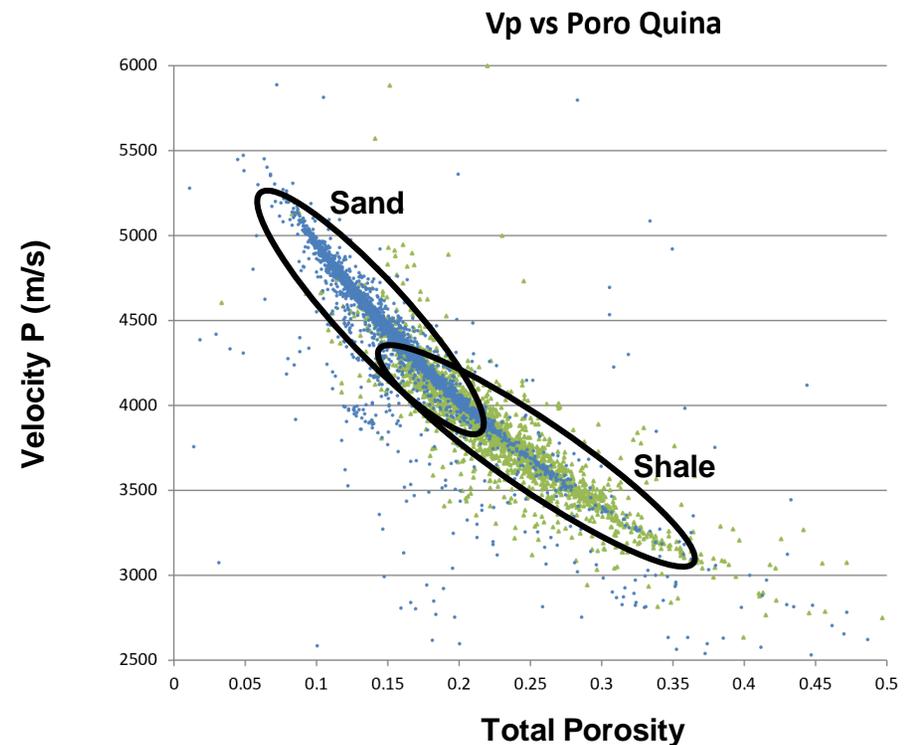
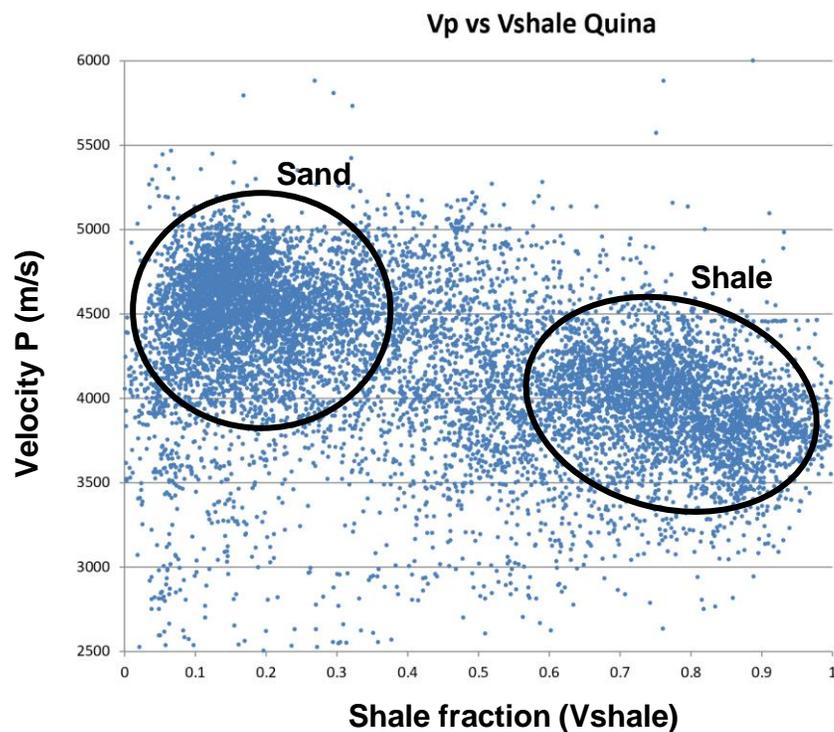
2D & 3D seismic integrated velocity model



The seismic inversion technique allows estimating the elastic properties of the medium that explain the observed seismic reflections. The reflectivity is calculated by the well-known Zoeppritz formula; an advanced estimation algorithm is used taking into account the previous information on the elastic properties and the source seismic wavelet.

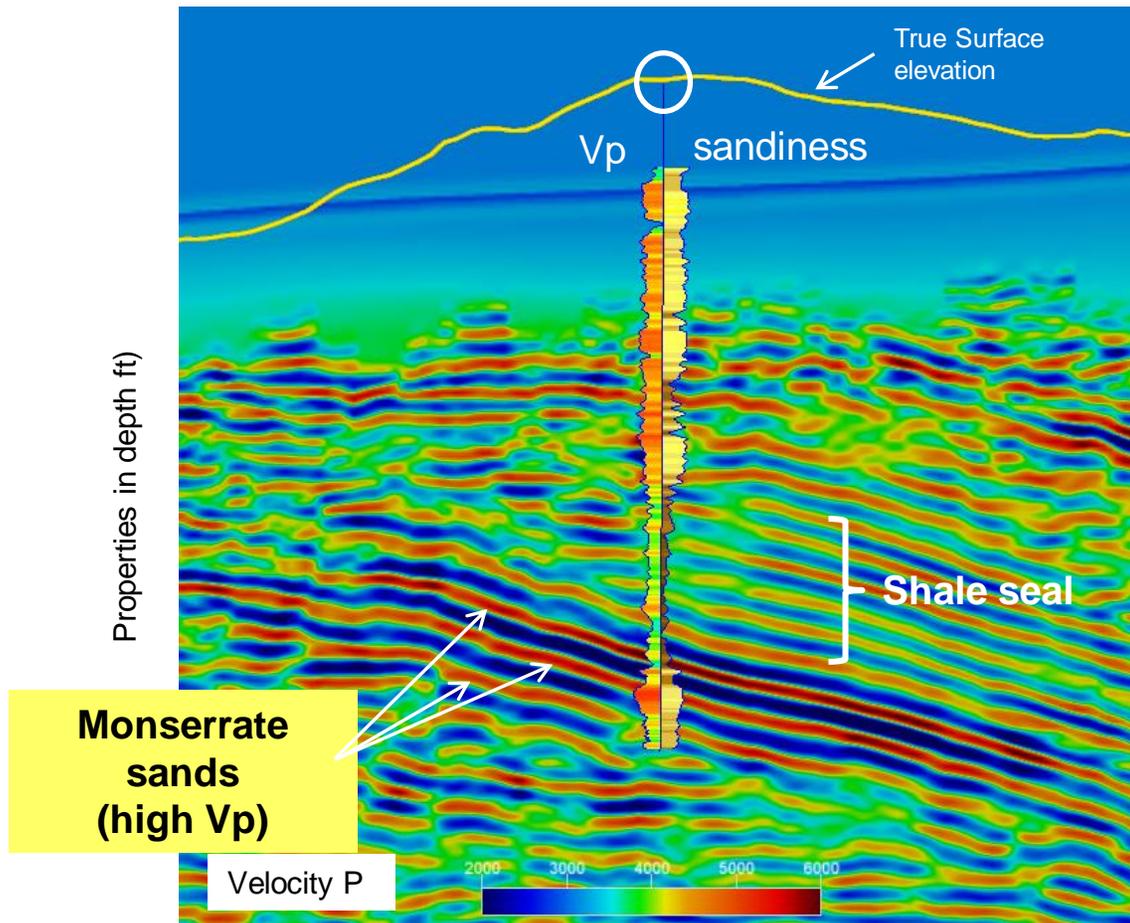
## Lithology & Porosity plots

The sands in this area are characterized by a higher seismic velocity than shale, as well as lower porosity, higher acoustic impedance and density than clays. This allows to discriminate sands and clays from the properties estimated with the investment

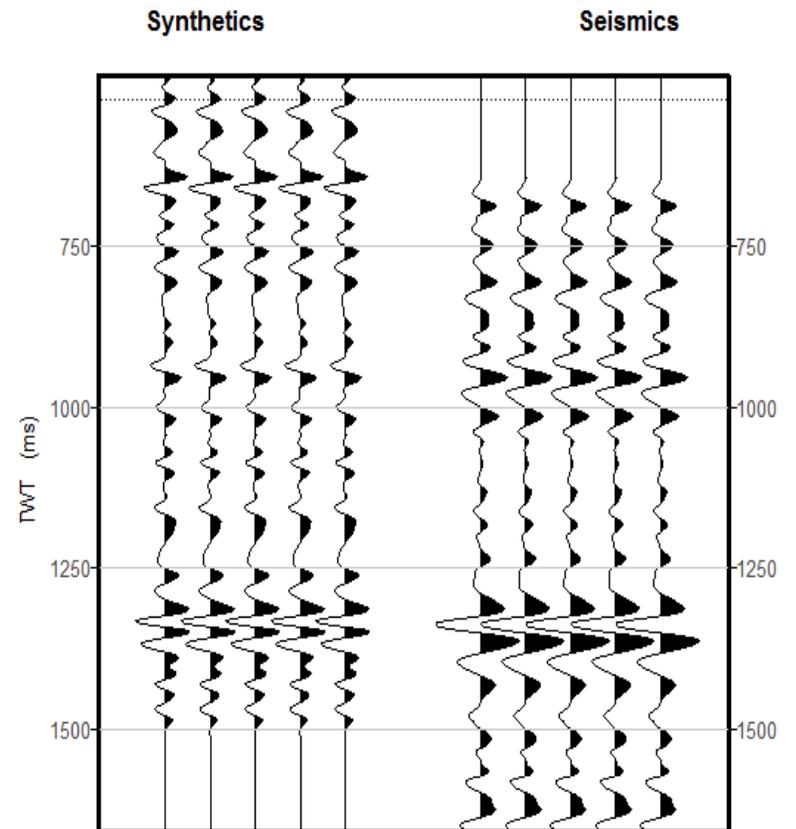


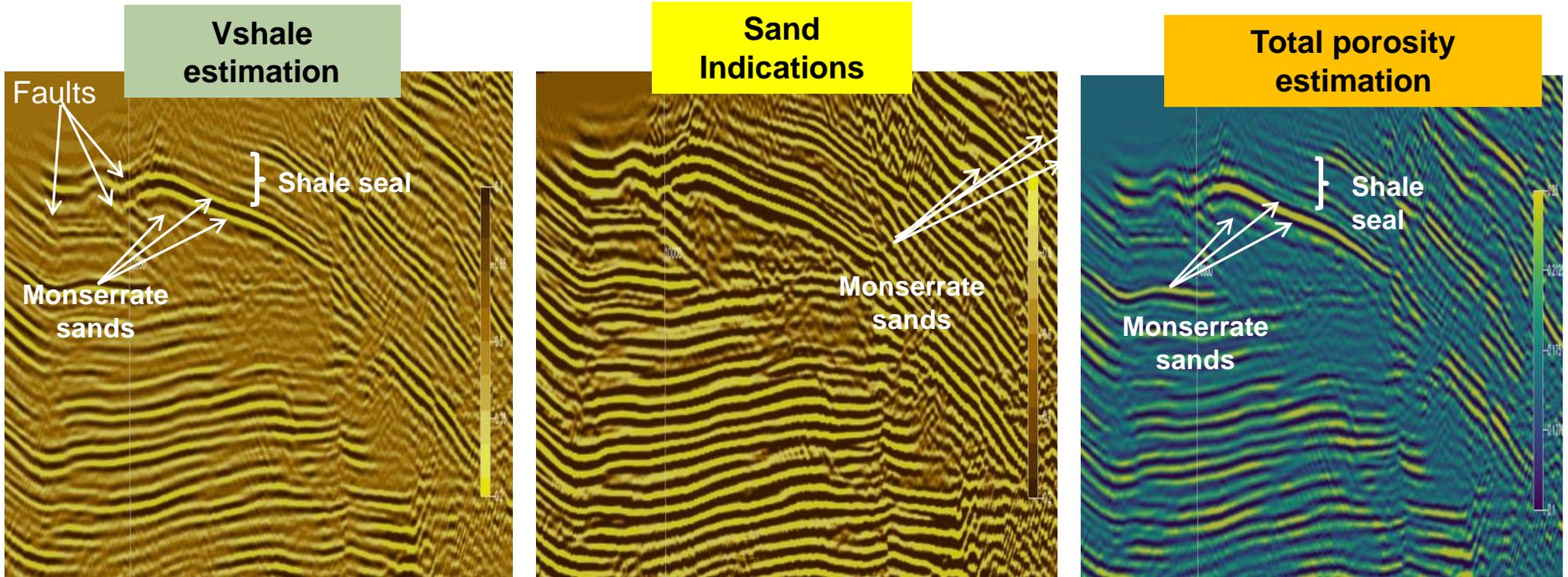
## Quina Well - Inline 2067

P velocity in log and seismic



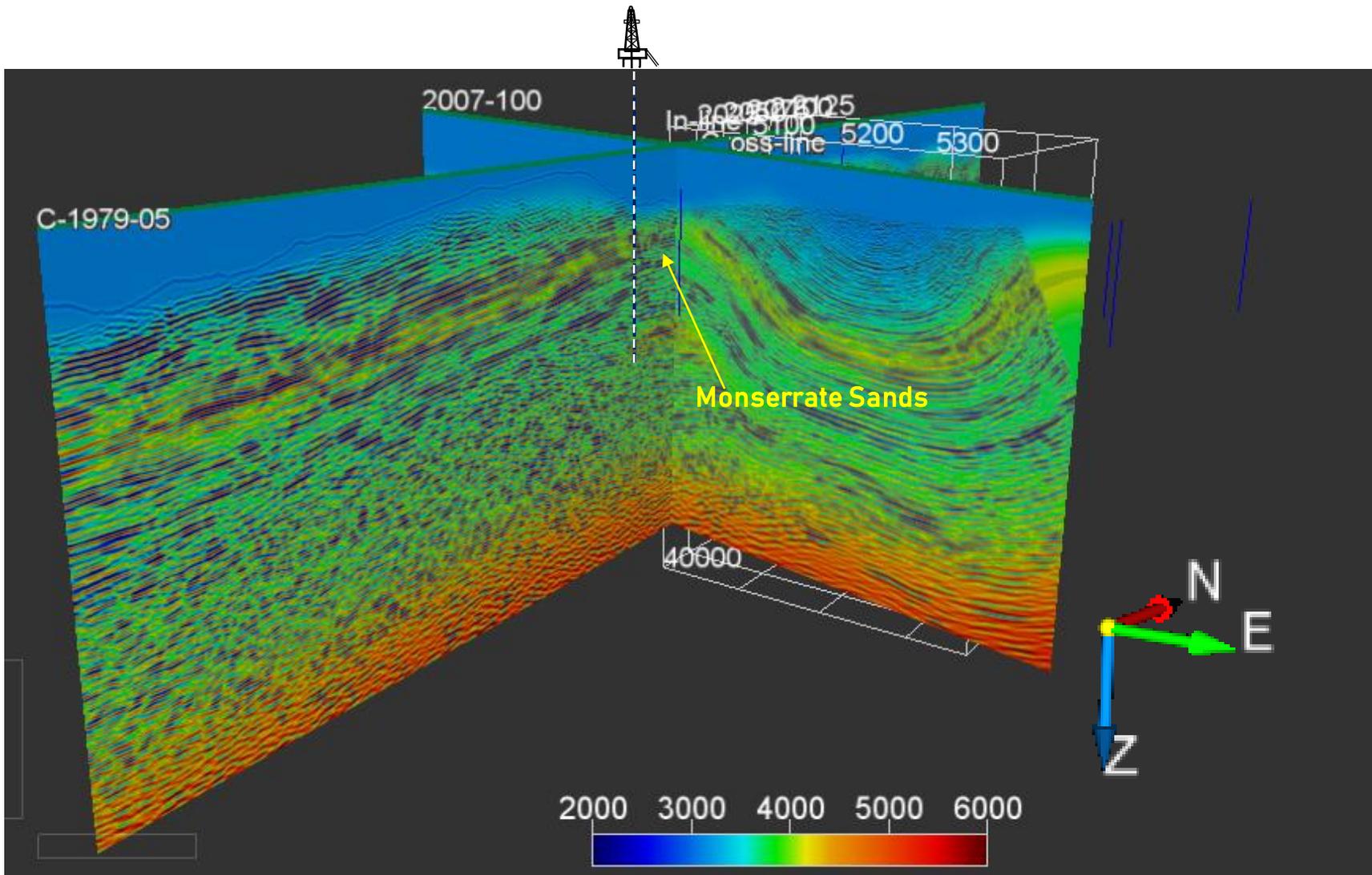
Seismic – log tie in time domain

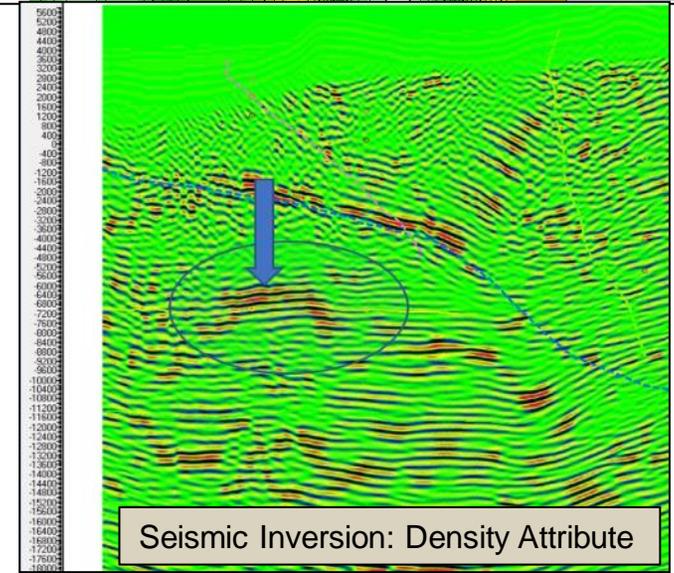
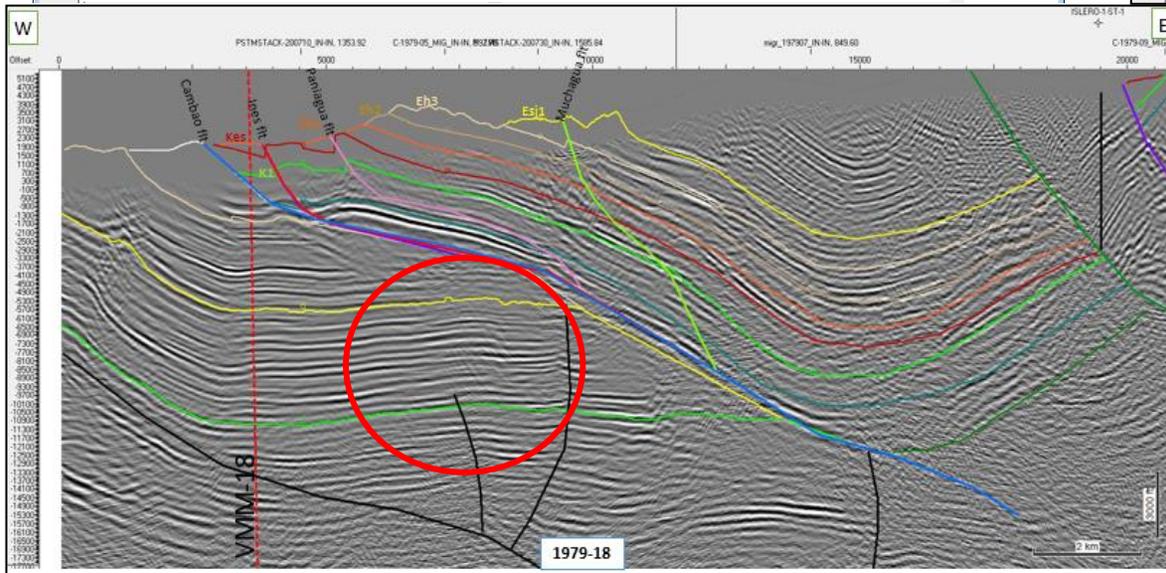
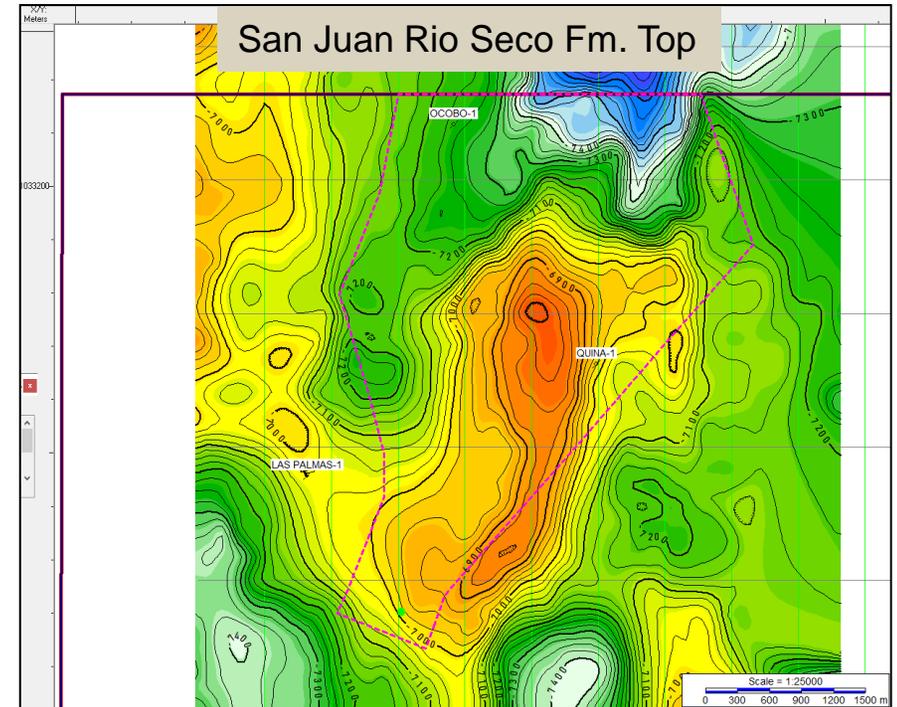
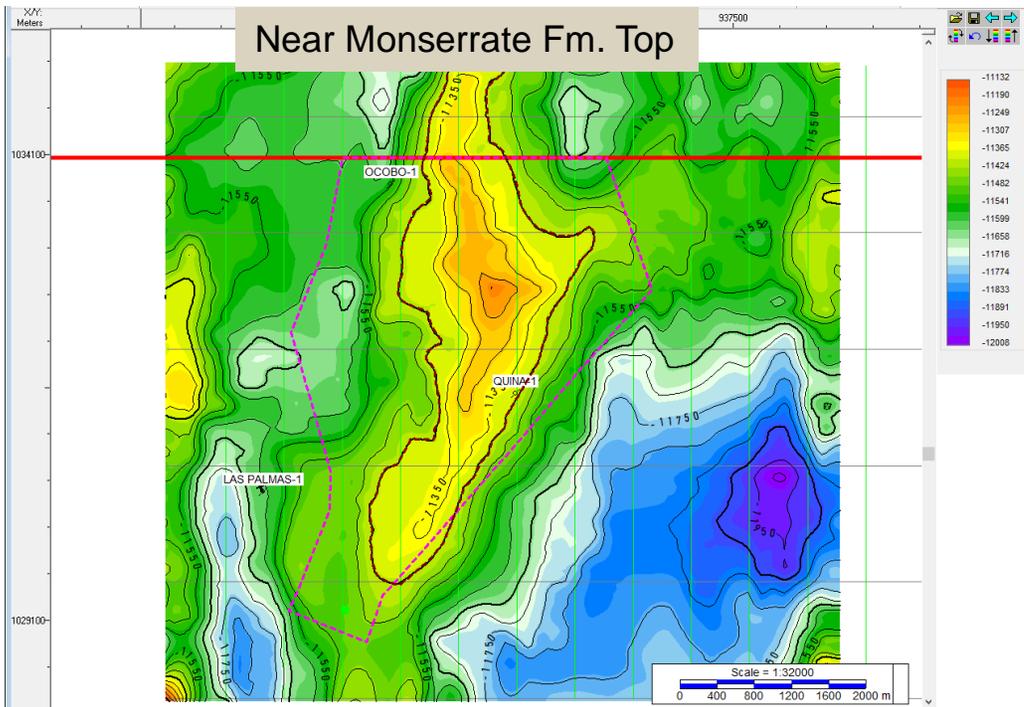




*Hércules Norte (2D Line 1979-18)*

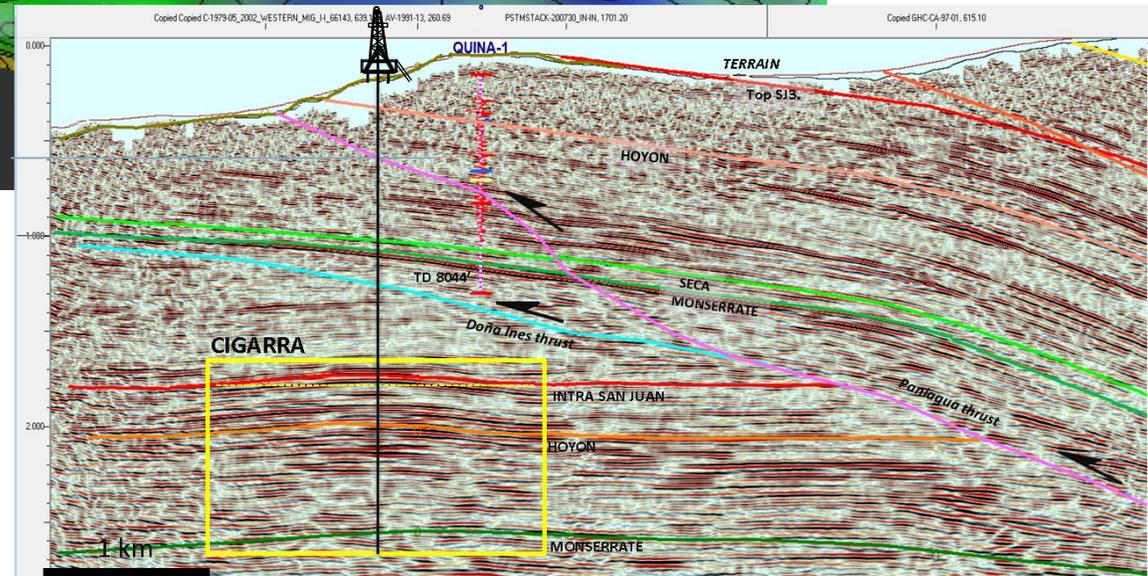
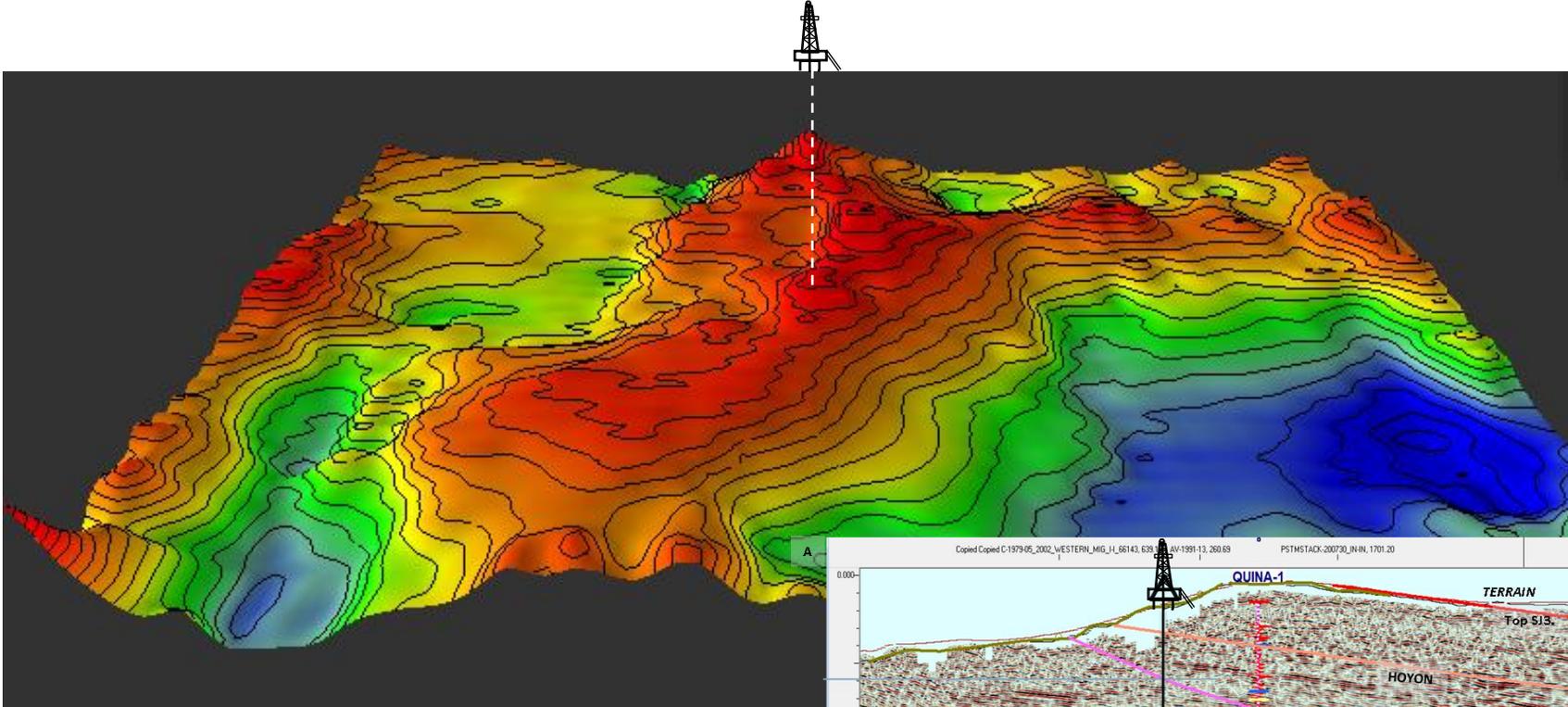
## Hercules 1 (proposed vertical trajectory)





## Cigarra 1

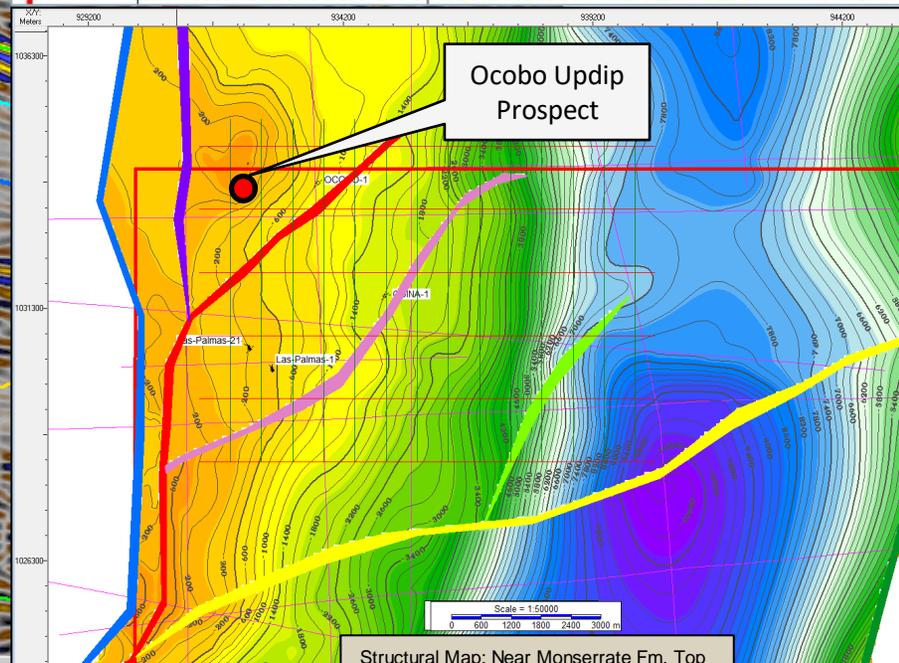
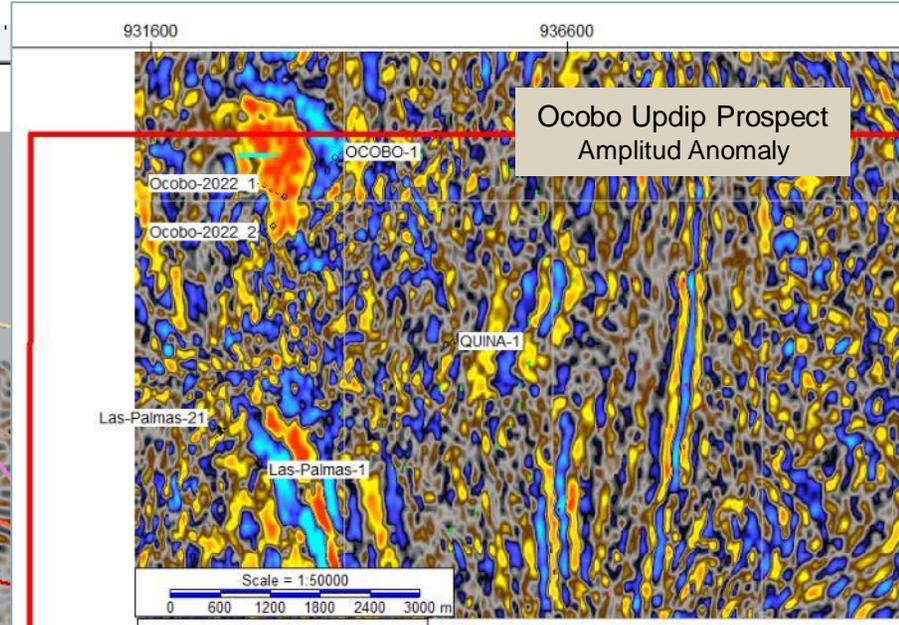
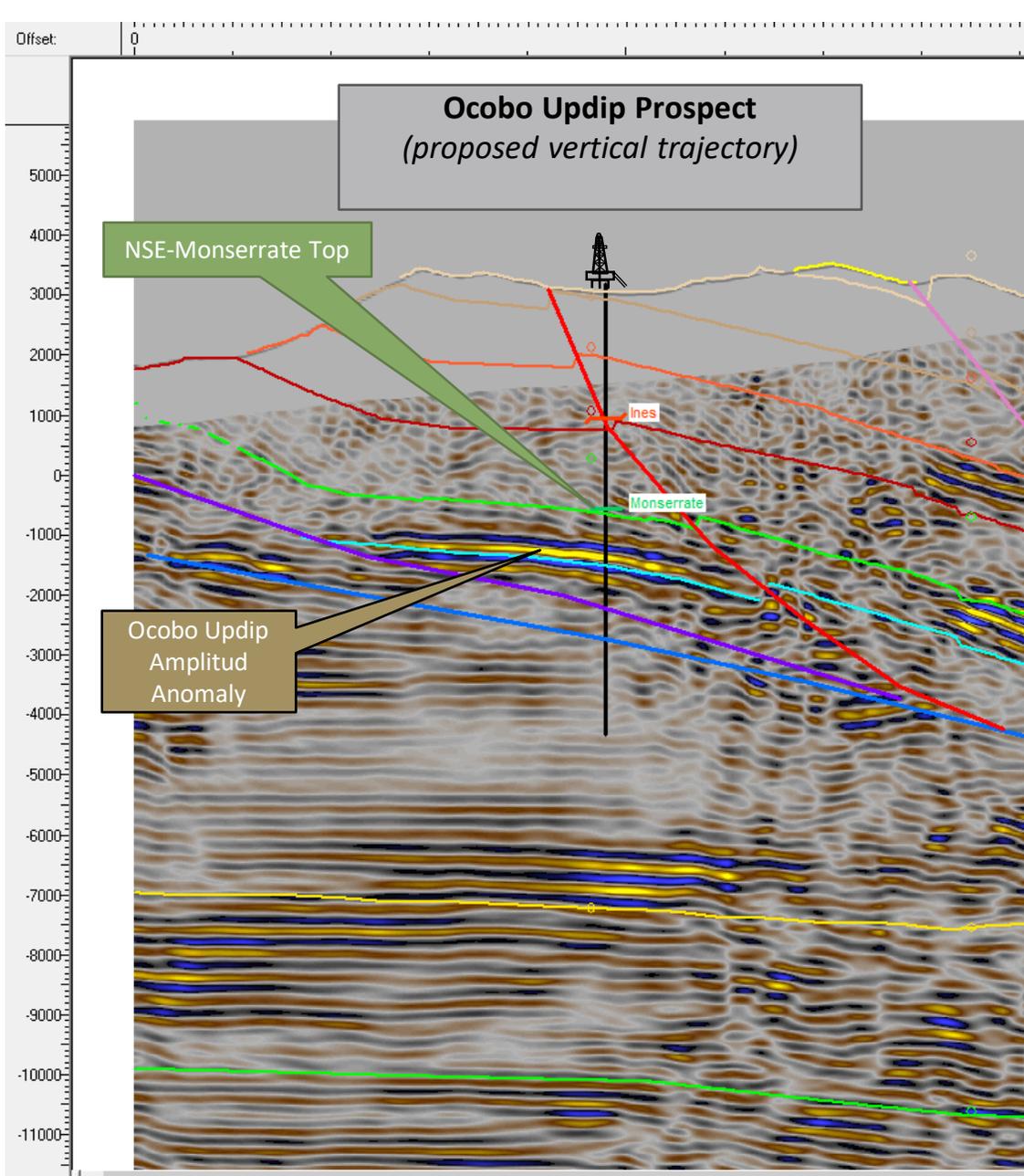
(proposed vertical trajectory)



### Monserrate Fm:

- $\emptyset$ : 13%
- Hc Sat: 65%
- Closure Area: 38,000 acres
- Net Pay: 47 - 73 ft





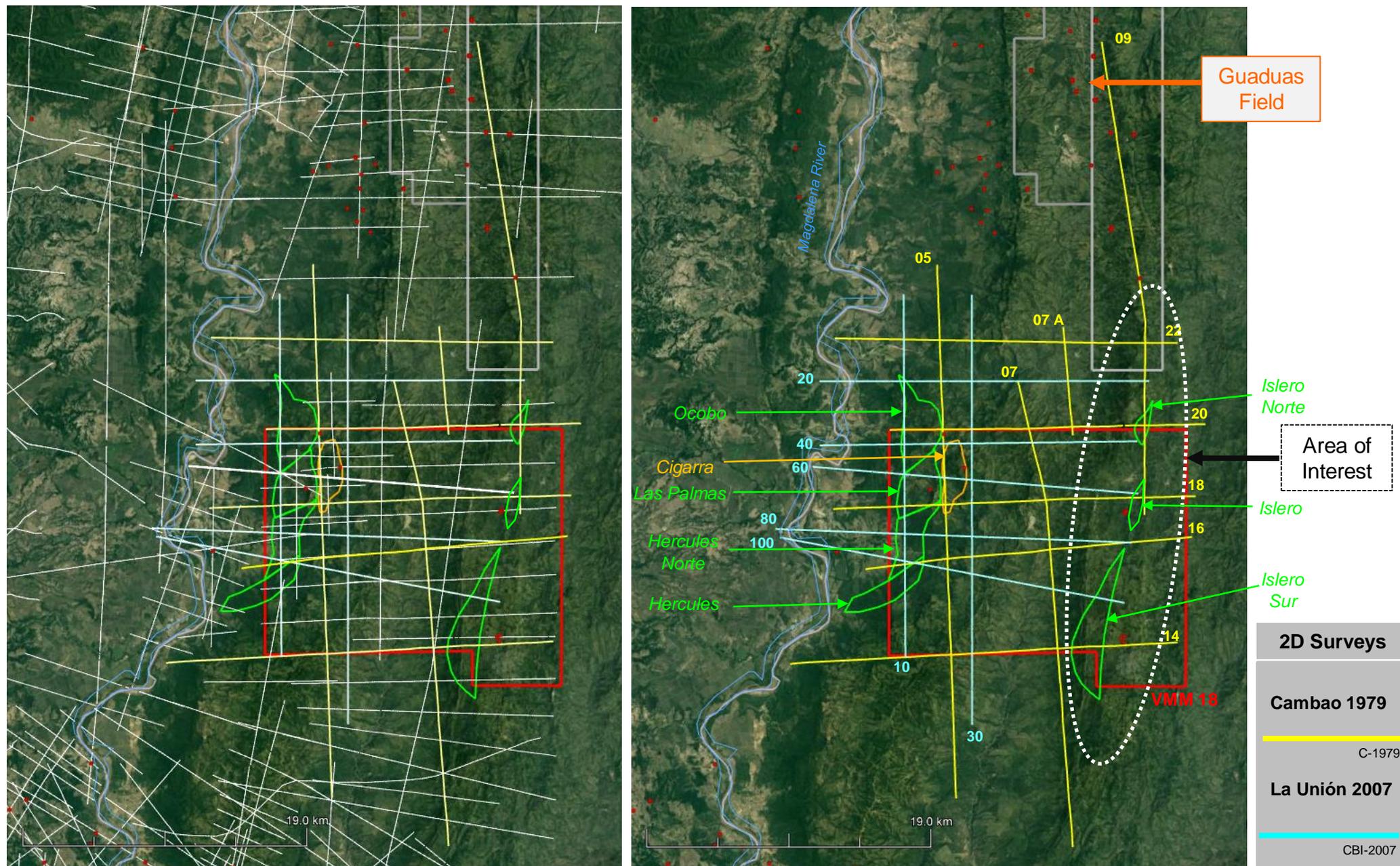
# Colombia Block VMM 18

## 2D Depth Reprocessing Test Eastern Oil&Gas Trend Guaduas Syncline Play

Currently a 2D Seismic Line Depth Reprocessing Test is being carried out to decide on the reprocessing of the Surveys Cambao 1979 & La Unión 2007, taking into account the improvement of the image in the sub-thrust zone in the eastern part of the Guaduas Syncline

# 2D Depth Reprocessing Test Seismic Coverage & Area of Interest

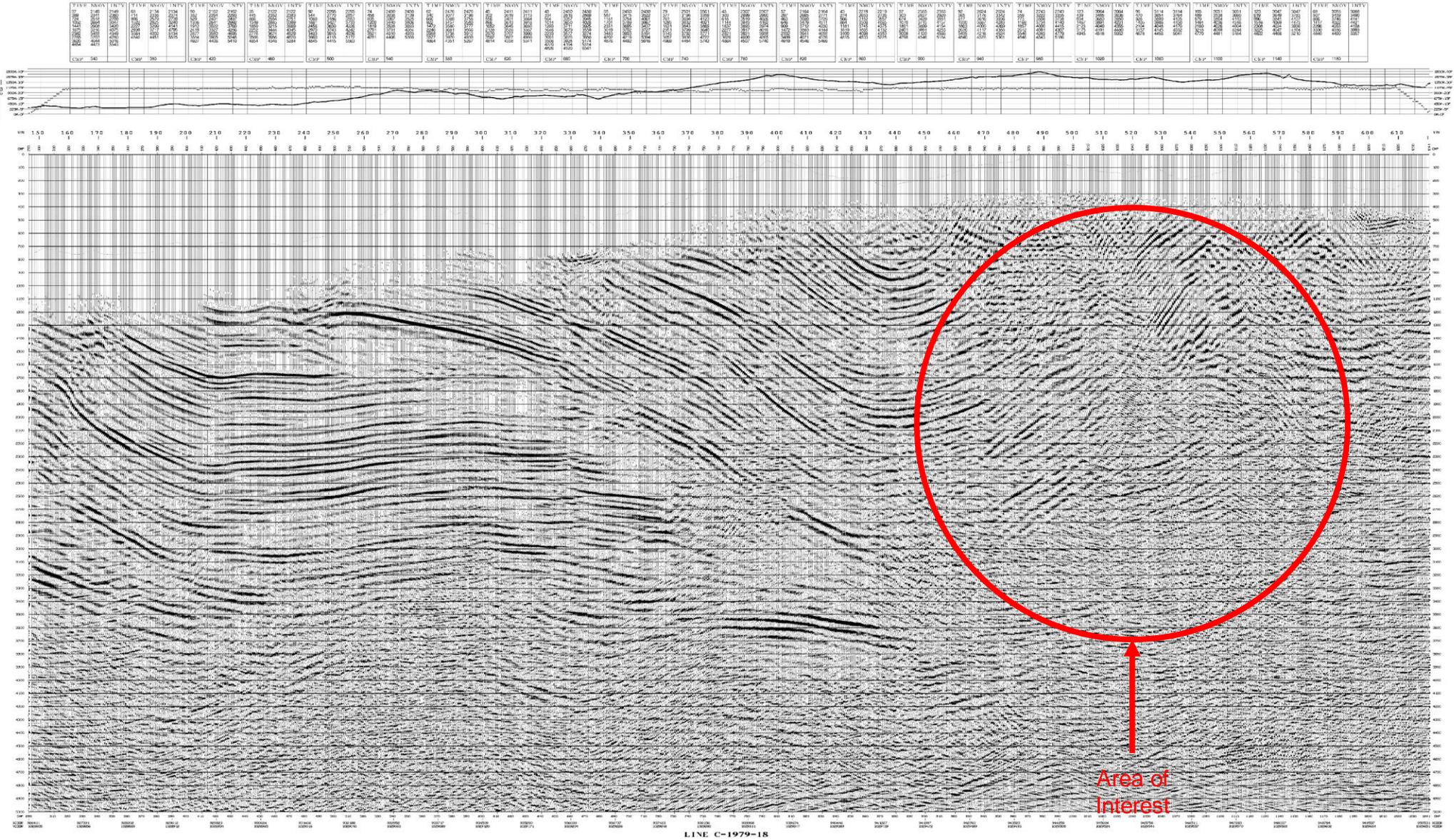
Strictly Private & Confidential

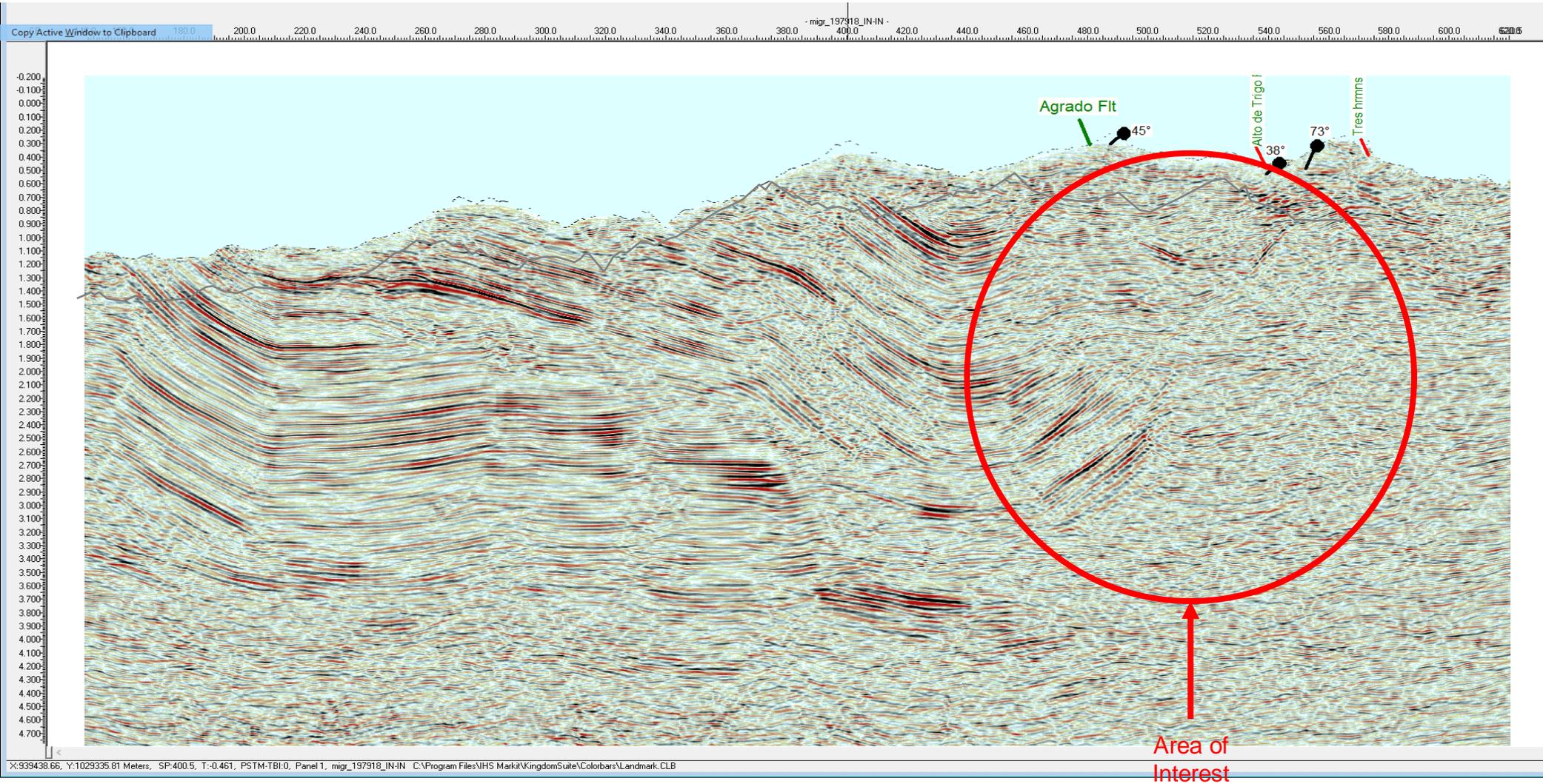


Area of Interest: Accumulation of Gas & Condensate south of the Guaduas Field.  
Target: Improvement of the Image under the Escuela Reverse Fault Plane (Bituima Thrust Trend) in the identified Islero, Islero Norte & Islero Sur Prospects.

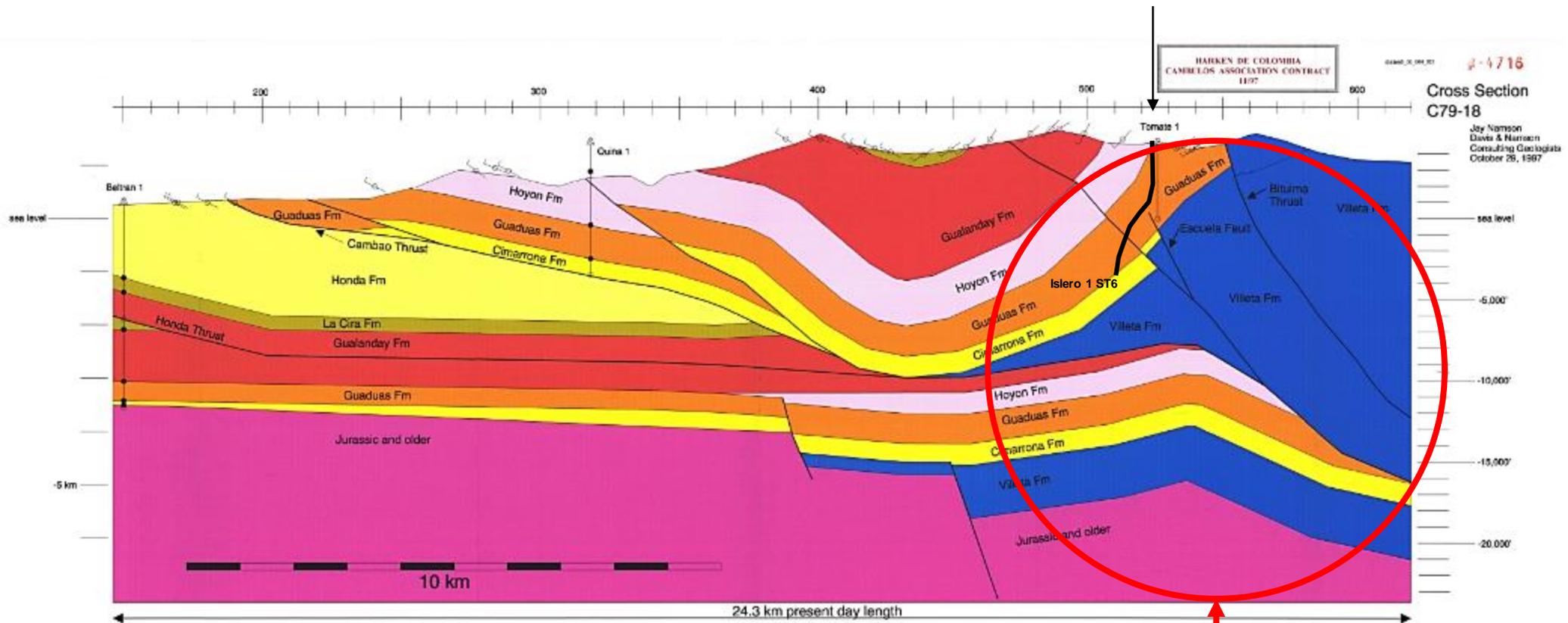
# Test Line - Post-stack Time Migration - 2014

Strictly Private & Confidential





## Islero 1 ST6



Based on the existing well & seismic data, Surface Geology and Regional Structural Model, we are currently working on the interpretation of the Line 18 to generate the local structural model to guide the PSDM in order to improve the image in the sub-thrust zone in the eastern part of the Guaduas Syncline.

Area of Interest

**END**