

# Prediction of Carbon Storage Potential using Pressure-Production Data

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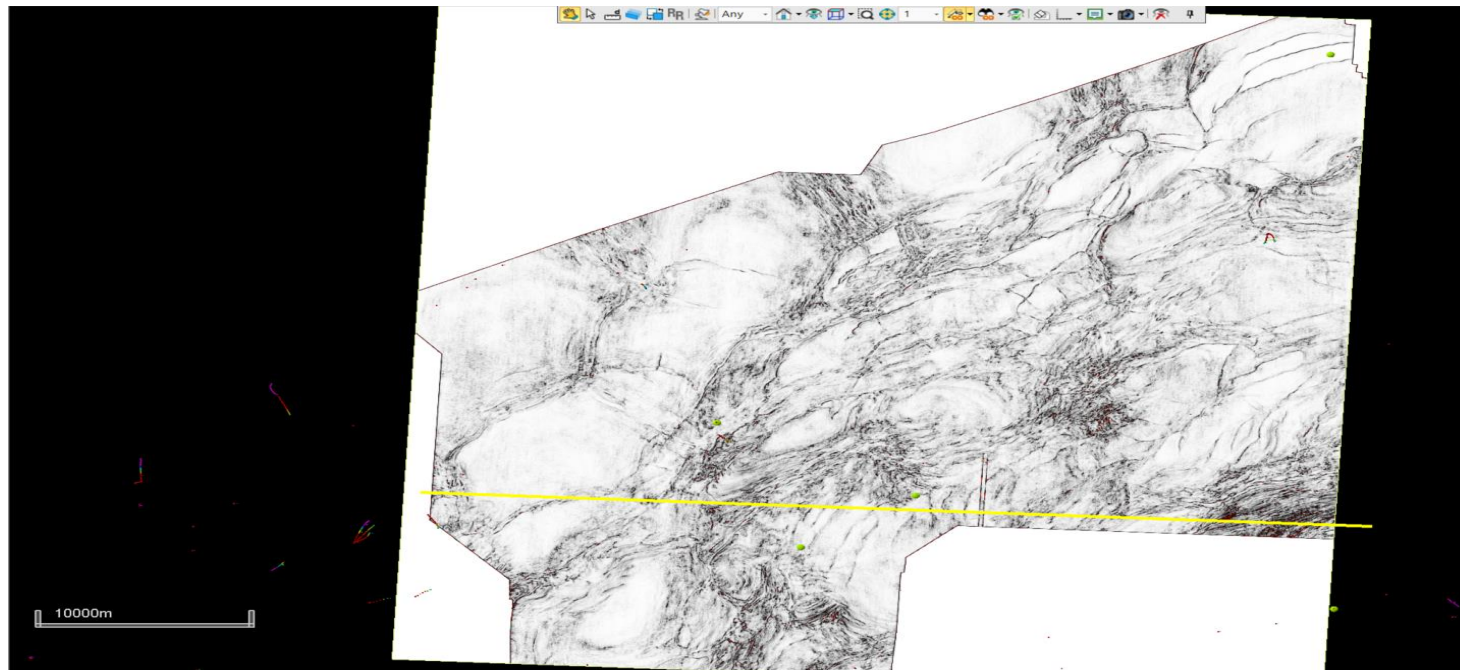


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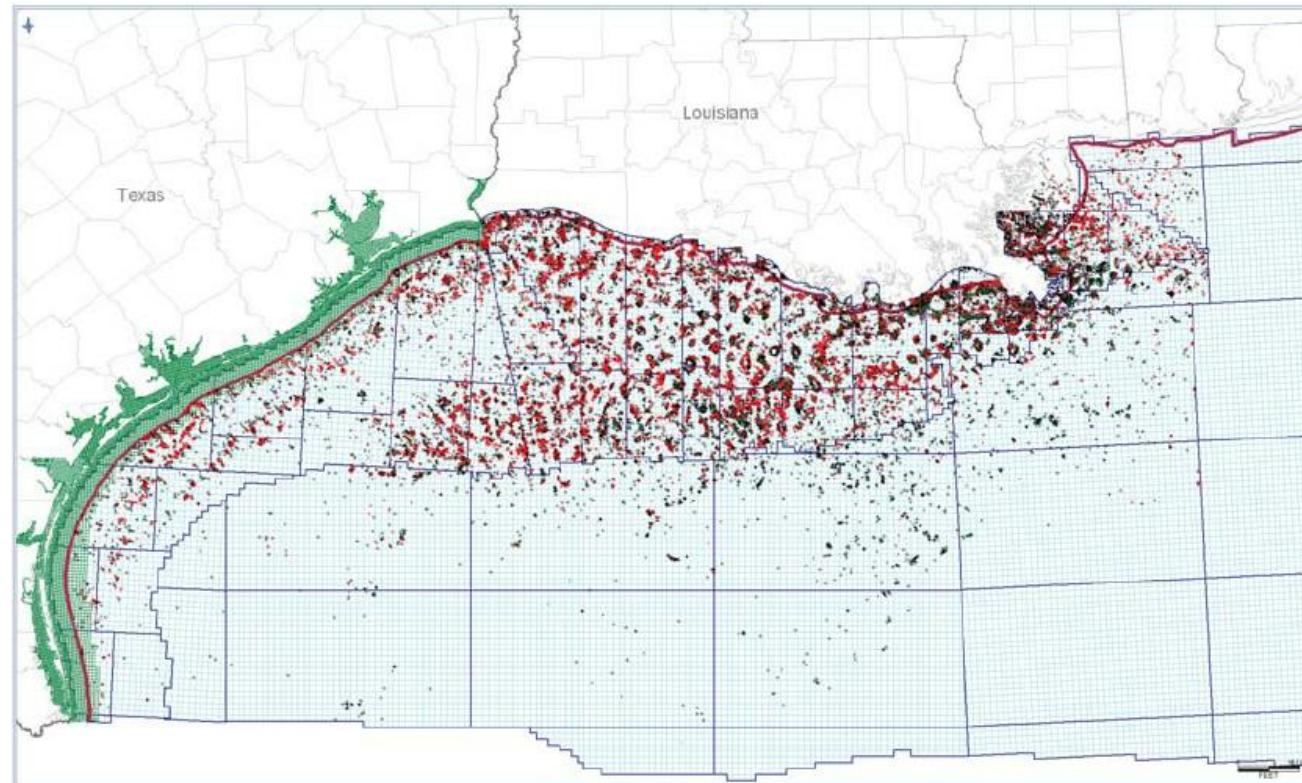
# Problem – Accurate Capacity prediction

- Fault blocks and reservoir thicknesses can be mapped and used to describe compartments, but how certain are we that these mapped boundaries define the compartments. Are these the right boundaries?



# My Study

- Using pressure and production data to understand reservoir performance and infer aquifer strength

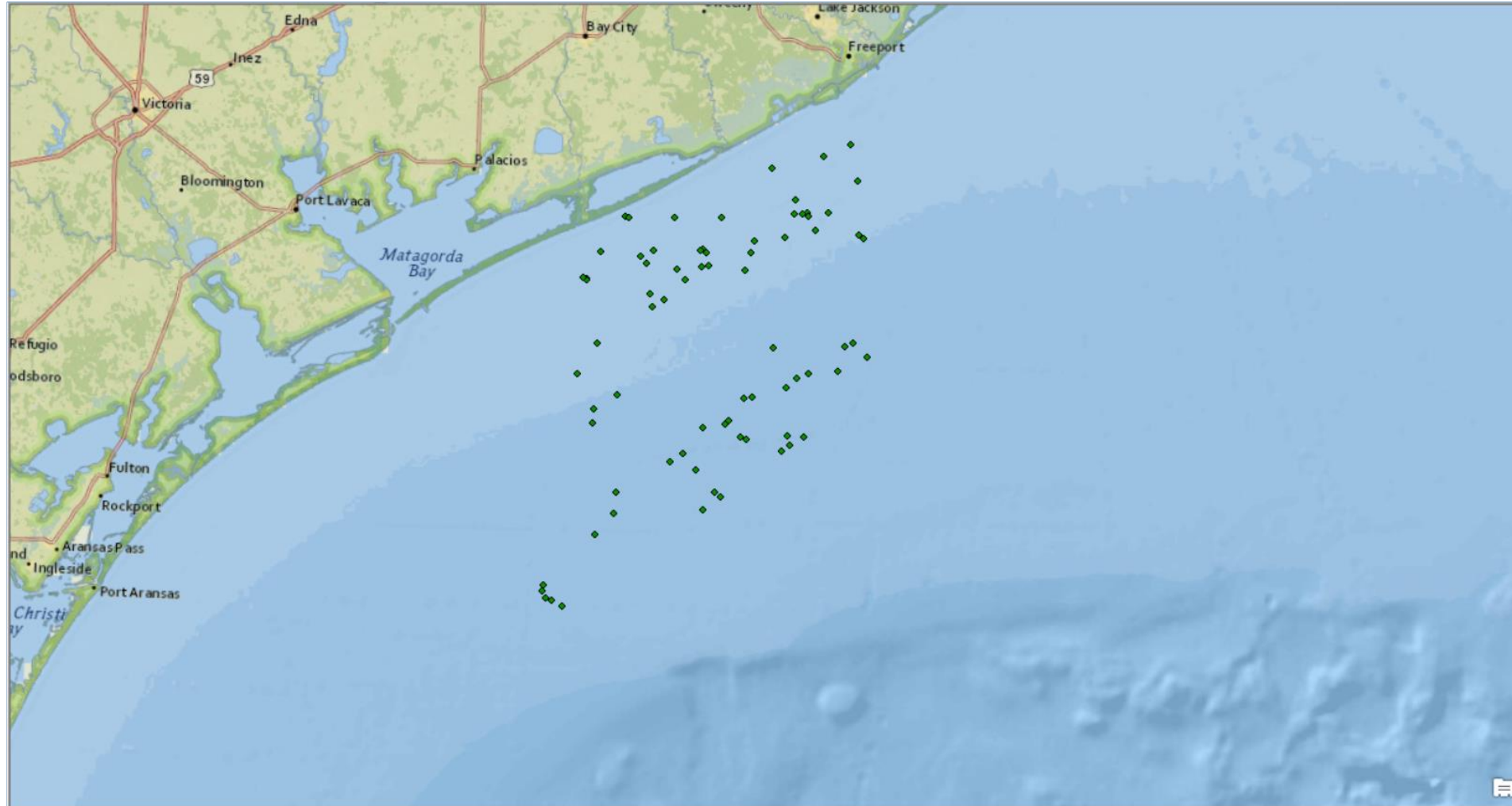


# What Do we gain?

Better prediction of pressure barriers would allow us to:

- Make better capacity estimation
- Lower investment risk
- Provide landowners and regulators with a better view of accessible resource
- Value projects and resource robustly.

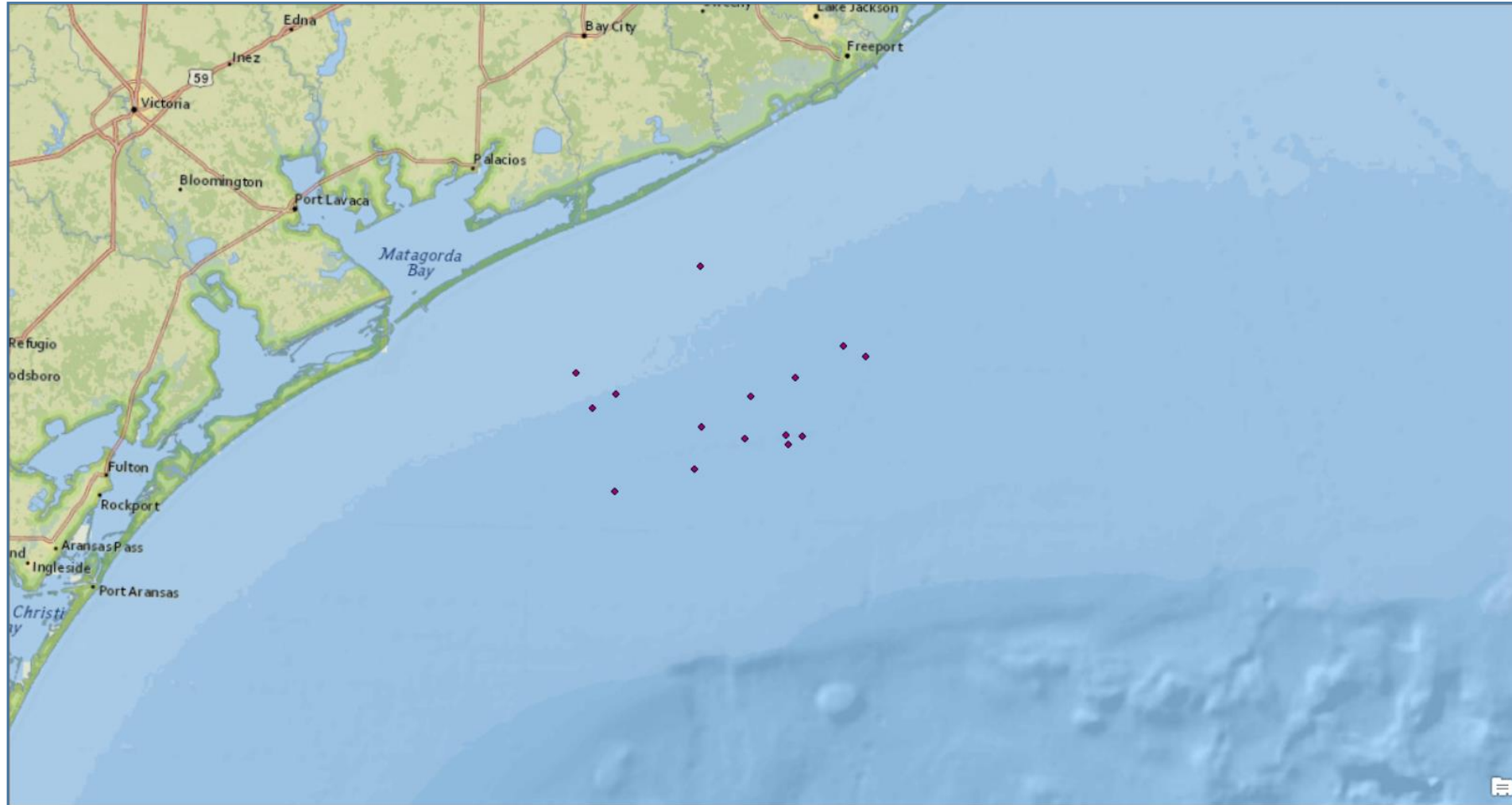
# 159 Reservoirs analyzed so far



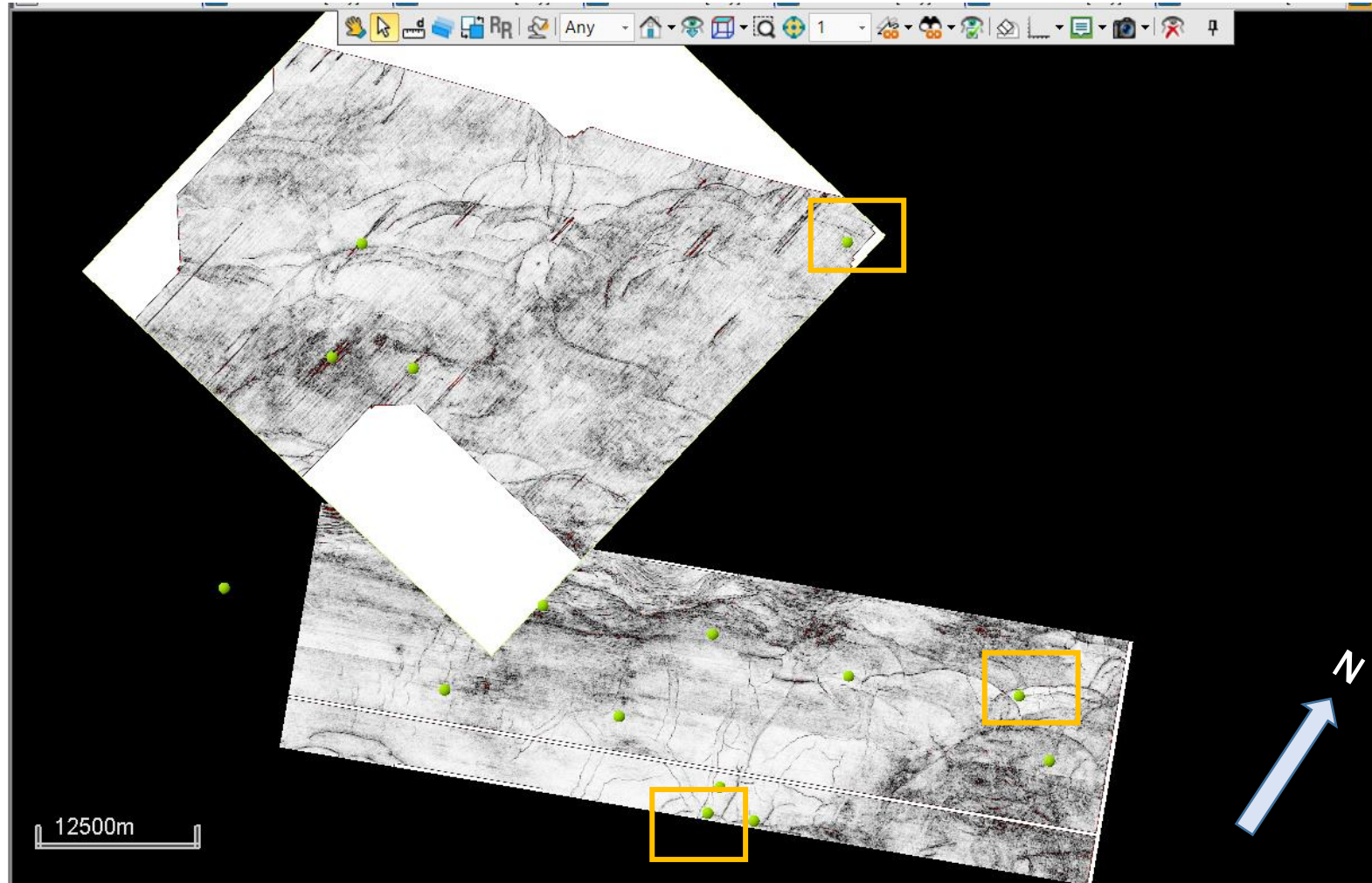


# 17 Reservoirs with record of only a single well

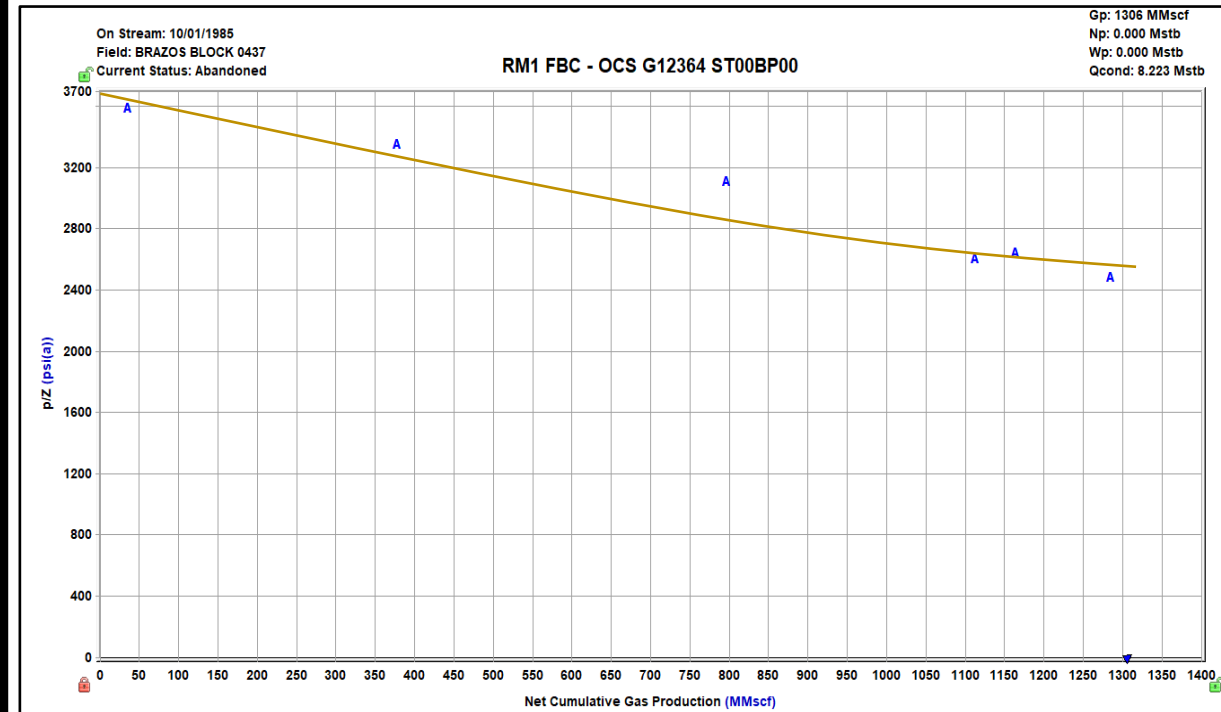
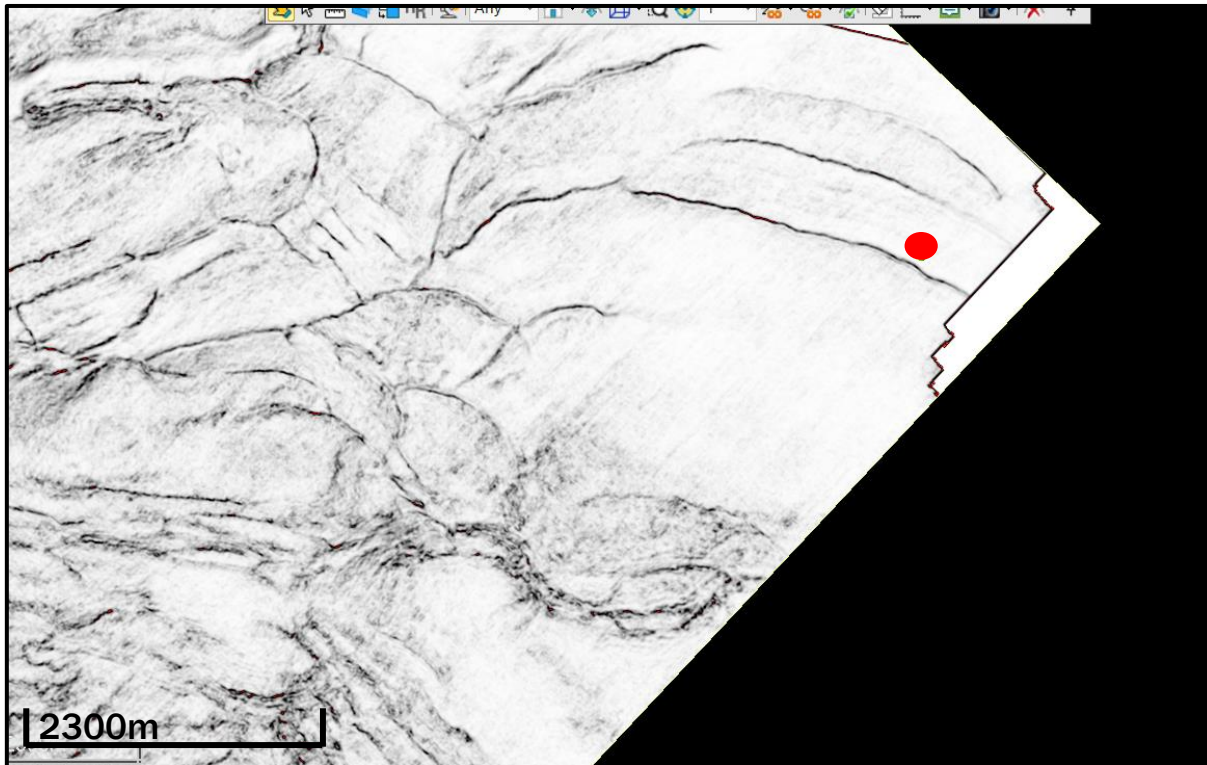
Focus on these 17 reservoirs because the goal is to evaluate each reservoir as unit.



# Coherence Map

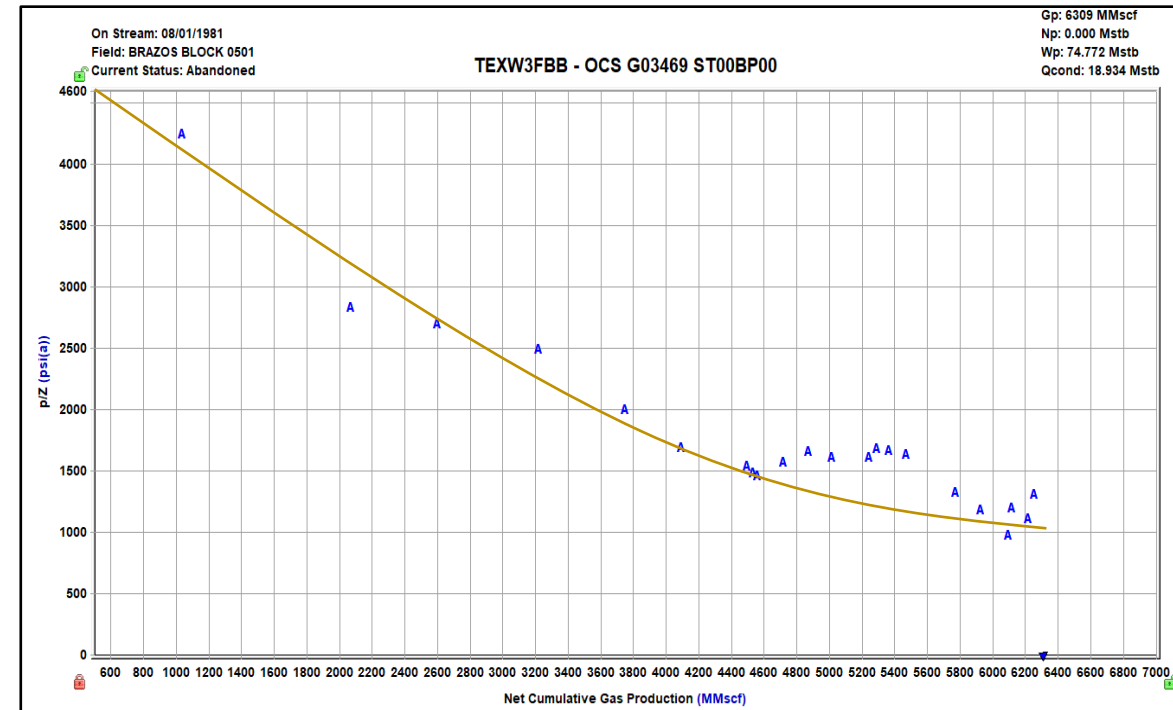
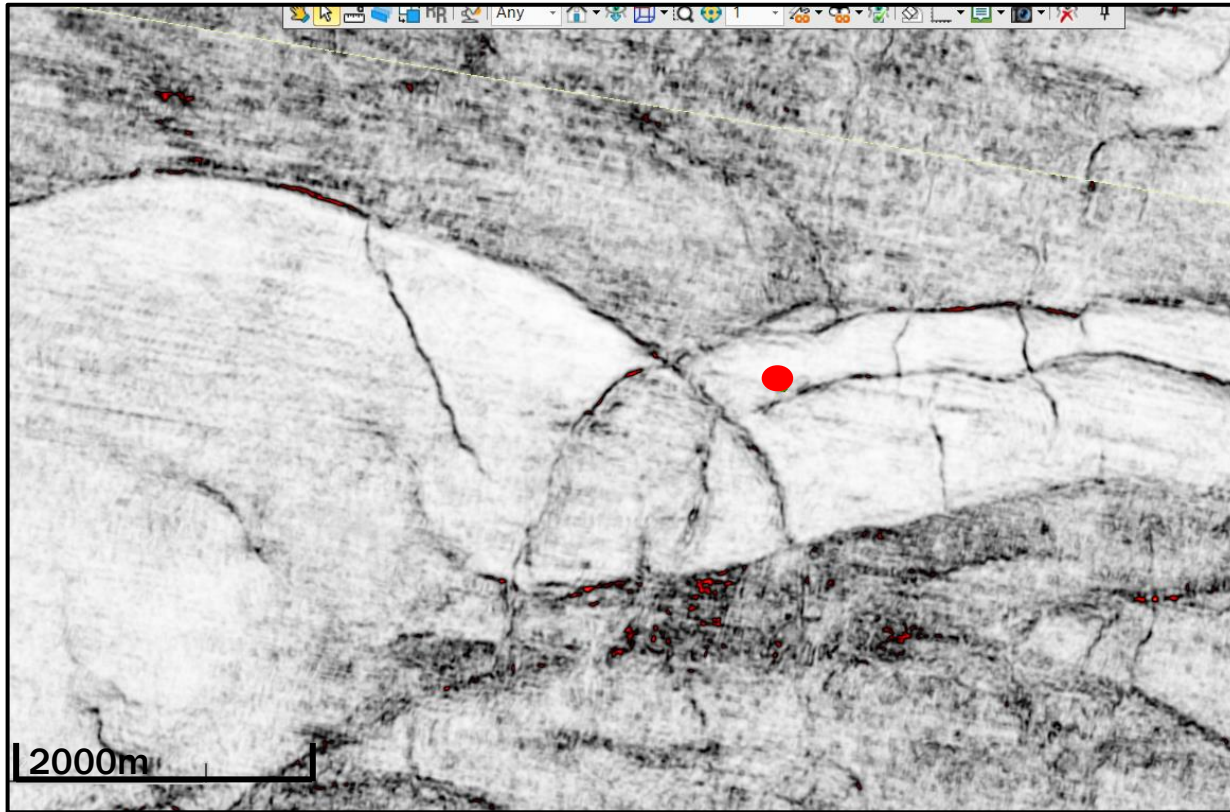


# RM1 FBC Size and Pressure Performance

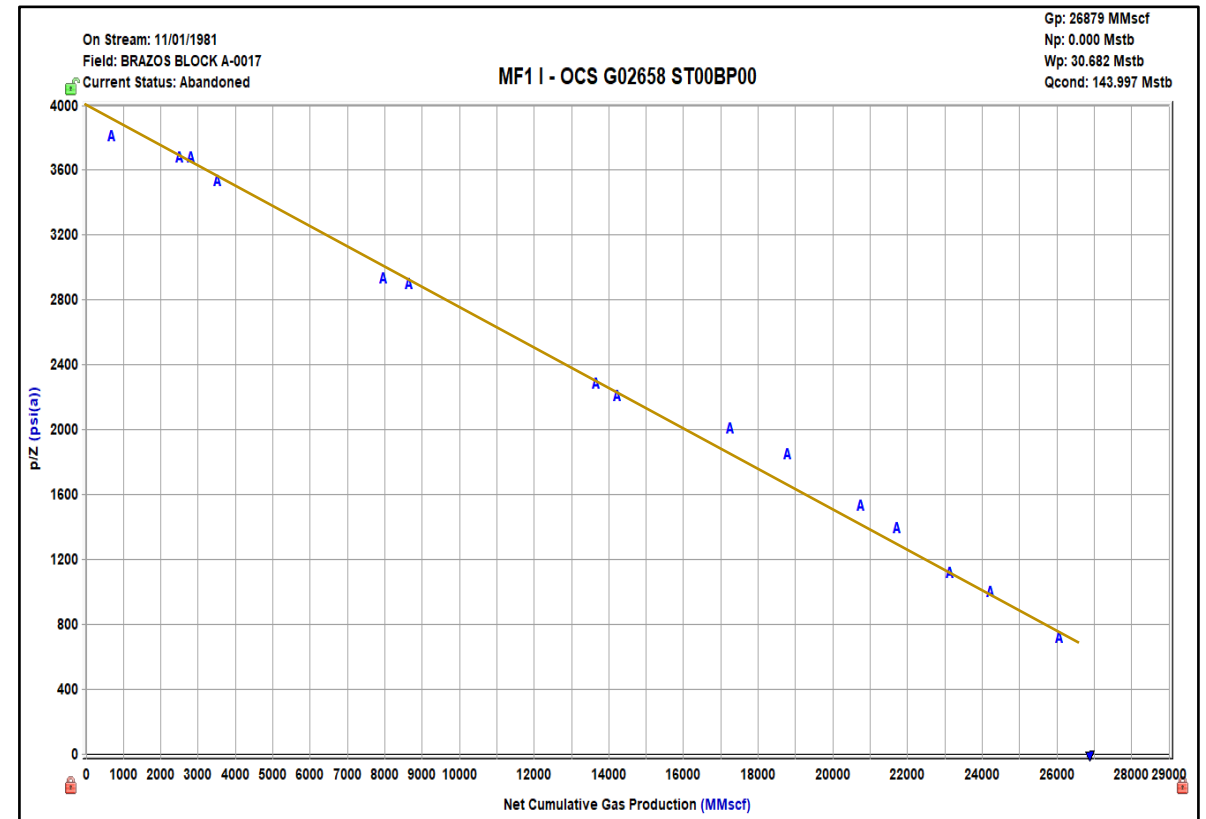
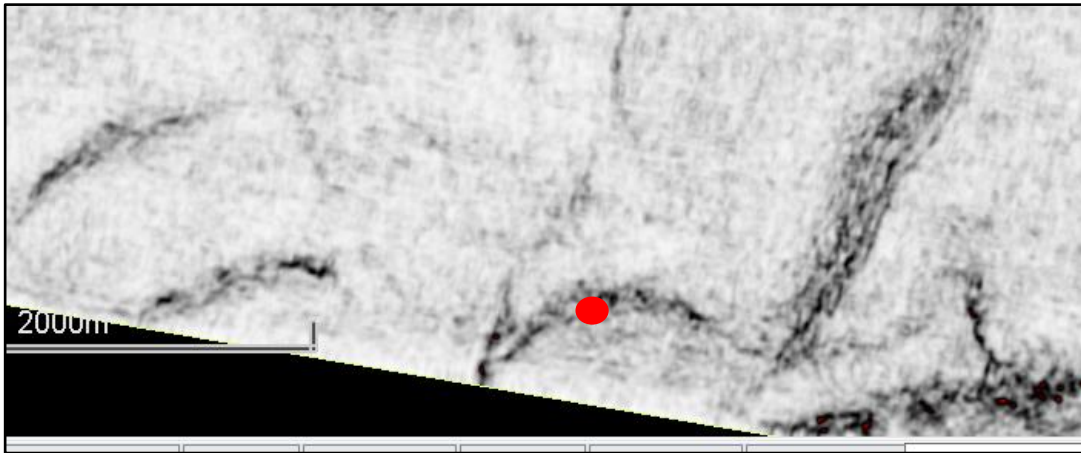




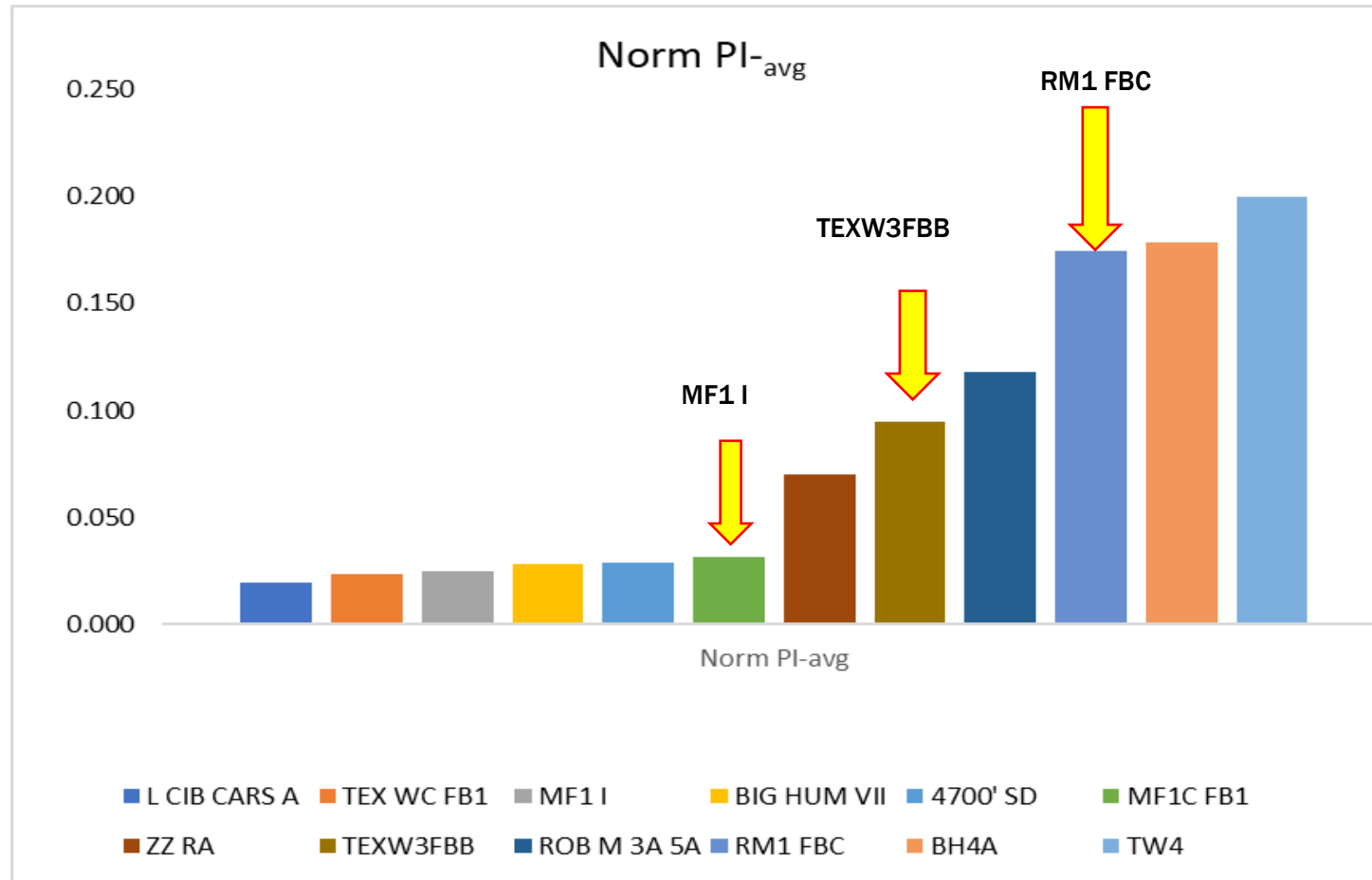
# TEXW3FBB Size and Pressure Performance



# MF1 | Size and Pressure Performance



# Normalized Average PI



Some of these do not correlate – trying to understand why

# Next Steps



- Apply methods to other onshore locations along the Gulf of Mexico where more data is available
- Conduct an assessment of boundary conditions for the Gulf Coast