Haynesville Rock Properties

Qi Ren

Early career PhD student

Advisor: Mrinal Sen & Kyle Spikes

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BACKGROUD

- B.S. Applied Physics   Jun.2010
  USTC, China
    Up-conversion material properties and application
- Graduate study   Aug.2010-Dec.2011
  Physics Department, UT-Austin
- Ph.D student in Geophysics   Jan.2012
  UT-Austin
- Engineering Intern   Summer 2011
  ETC, Chevron

Previous Case Study
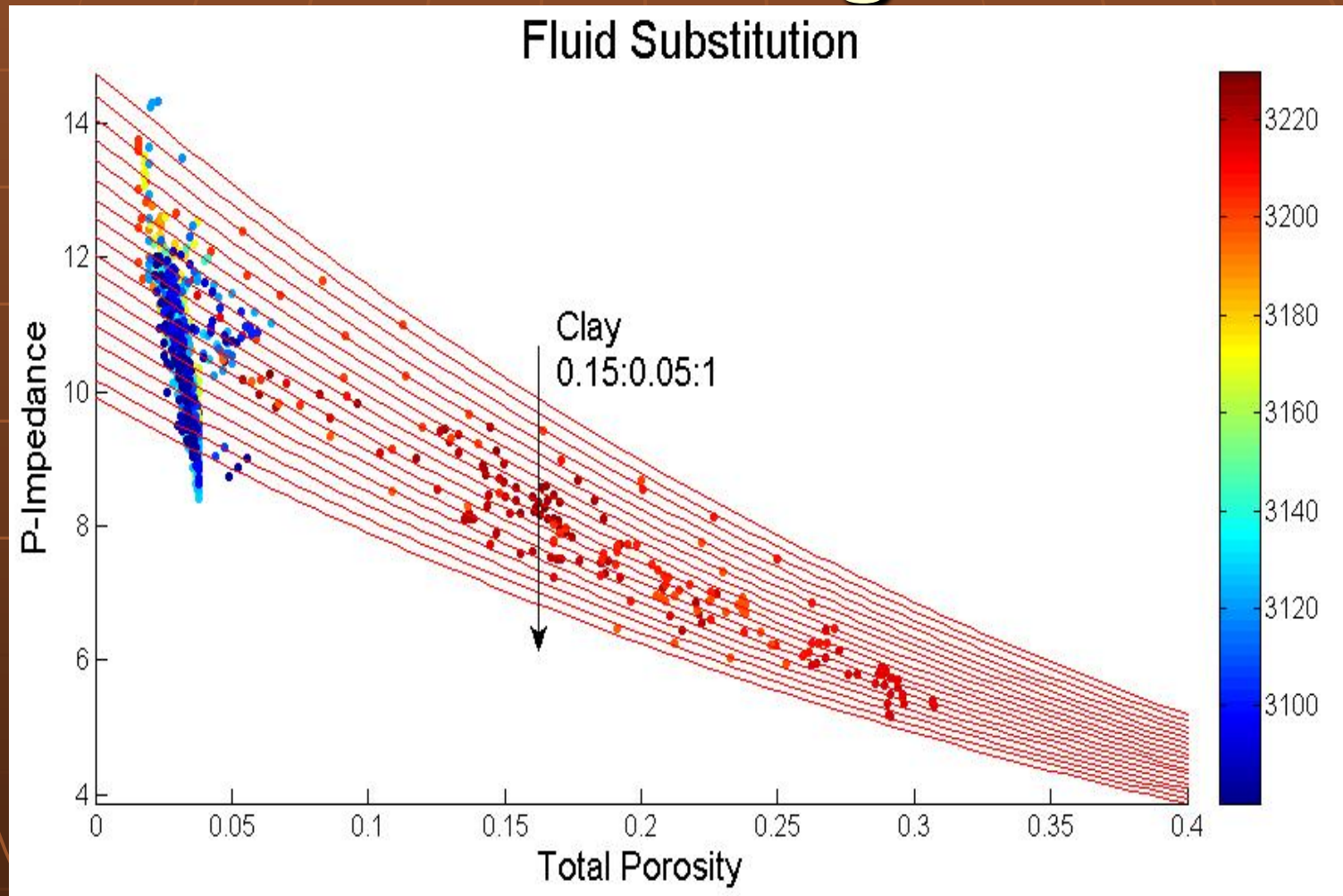
- Rock Property Modeling
  - Ibhubesi Field, West South Africa
  - Target: Porosity- Impedance relation
  - Influence Factors: Vclay, Sw, Poro

- Model & Method:
  - Raymer relation
  - Fluid Substitution
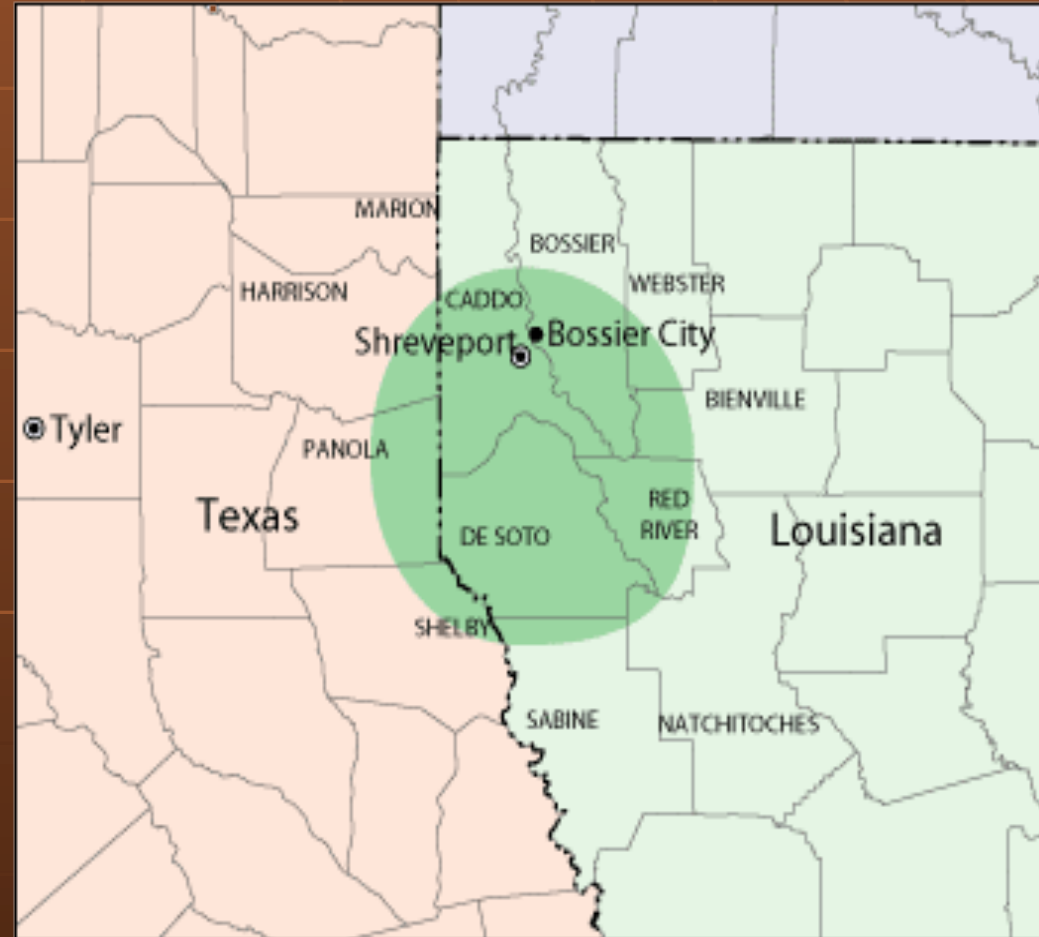
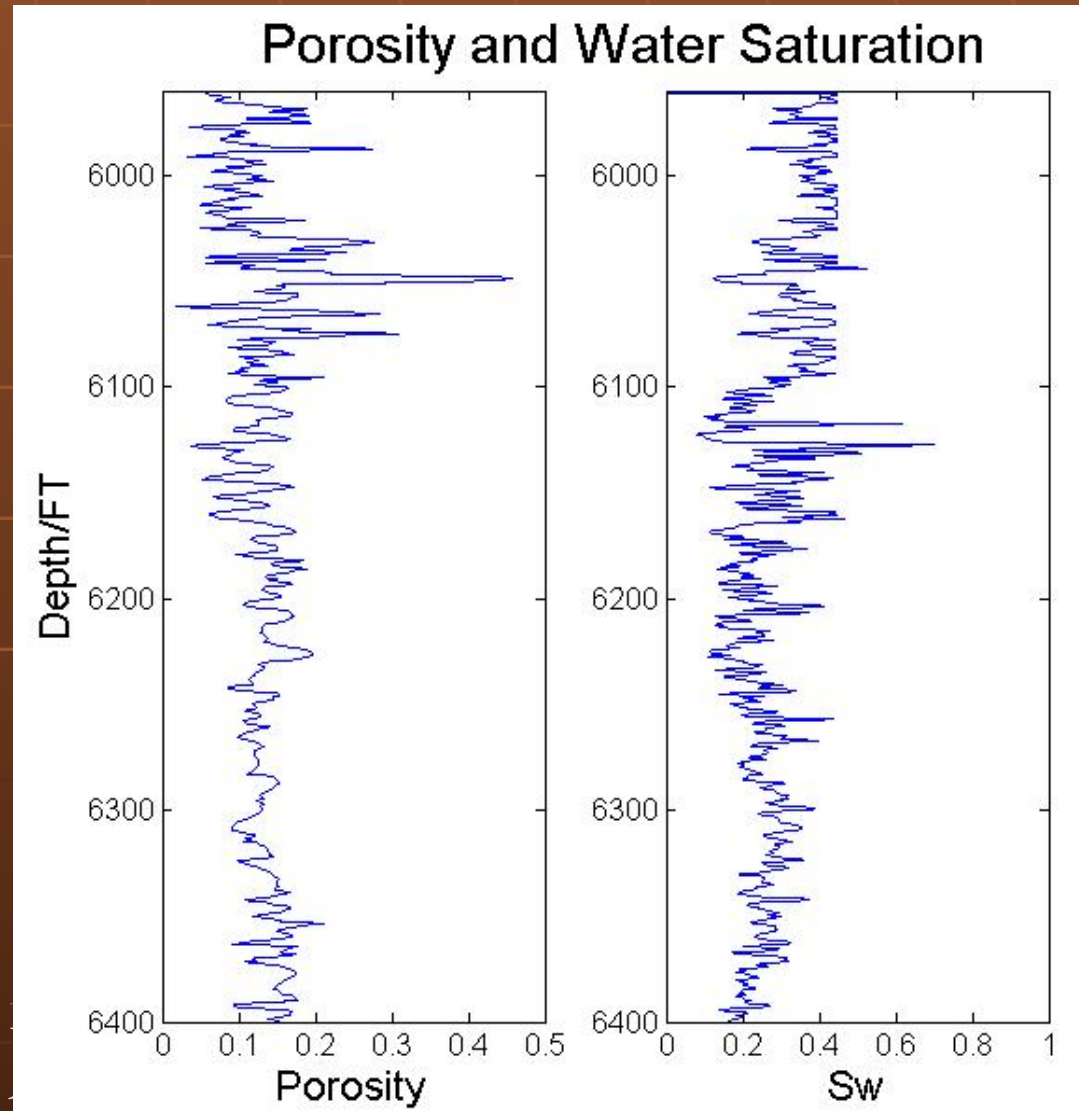# Ibhubesi Field Rock Property Modeling

Haynesville Rock Properties

- Louisiana, Texas
- One of the
  Largest natural gas field
- Depth 10,000-13,000 feet
  200-300 feet thick

- Location:Harrison
- Two well

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Haynesville Rock Properties

- Aspect ratio

- Composition

- Fluid content

Porosity and Water Saturation

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