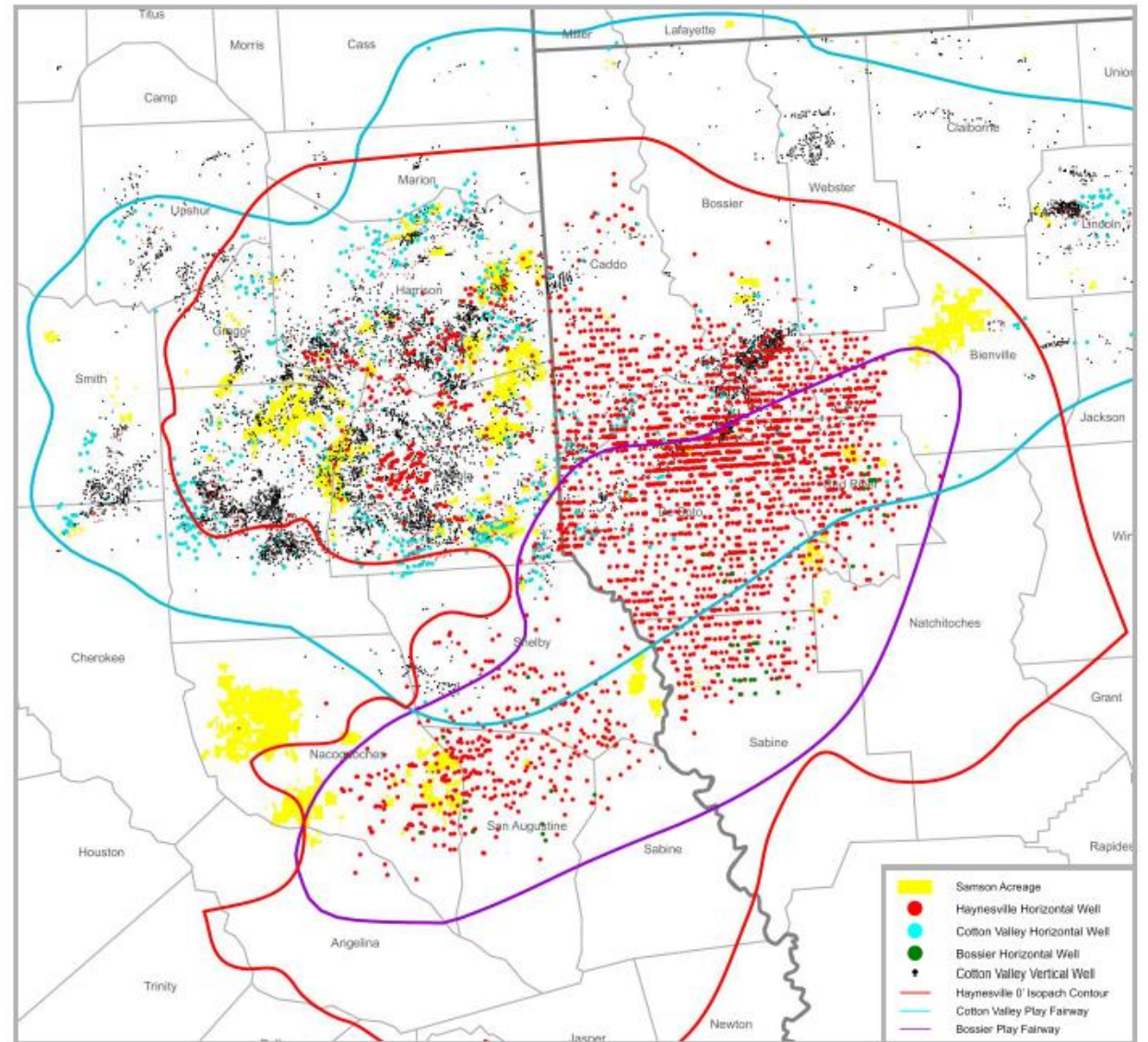


# East Texas / North Louisiana Geological Overview

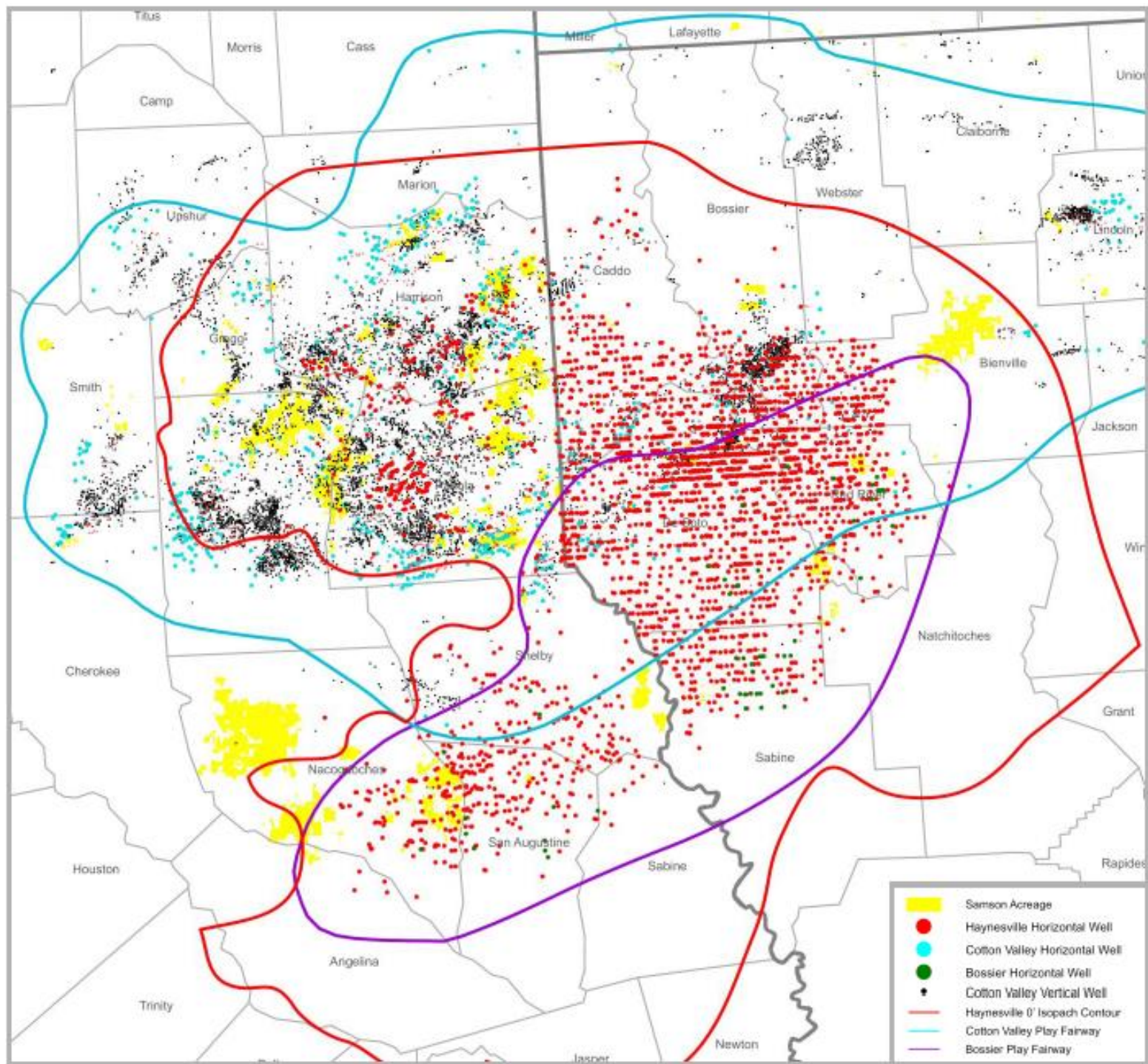
## Key Points

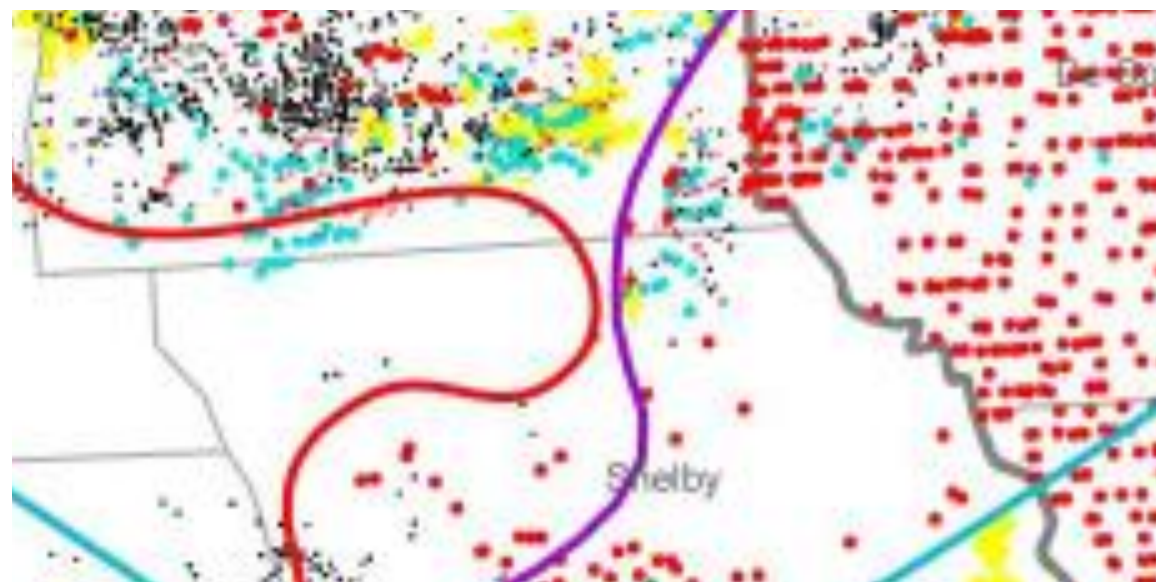
- Top tier oil and gas producing basin in the United States – multiple stacked pay horizons across large area with extensive and well-developed infrastructure
- Well-understood reservoir dynamics and geological characteristics over a stacked pay geologic column with significant well & seismic control
  - Extensive technical data set; including cores & micro-seismic, plus 1,037 mi<sup>2</sup> 3-D; 8,000 line miles of 2-D
  - Recent focus by industry towards areas with a higher liquids component (TX side)
- Mid-Bossier shale play lies above the Haynesville
  - Similar geology and reservoir properties to the Haynesville
  - Significant stacked lateral upside in Shelby Trough area on the Texas side of the play
  - Maturing shale play, with ~200 Hz wells drilled to date
- The Cotton Valley and Taylor Sand plays are stratigraphically above the Haynesville and are a series of fine-grained deltaic to barrier-bar type sand reservoirs
  - Liquids-rich; 20-35% of well stream
  - High vertical and horizontal well control
  - Stacked undeveloped Taylor potential
- Additional opportunities exist in vertical Travis Peak Sands, Pettit Lime & James Lime

## Play Extents









- Samson Acreage
- Haynesville Horizontal Well
- Cotton Valley Horizontal Well
- Bossier Horizontal Well
- Cotton Valley Vertical Well
- Haynesville 0' Isopach Contour
- Cotton Valley Play Fairway
- Bossier Play Fairway

