ABSTRACT

Some of the most important basins in the Lower 48 have been considered exhausted early in their life, before a resurgence proved their true potential, the Haynesville is surely no exception. Covering areas of East Texas and parishes in western Louisiana or over 10,000 square miles, the Haynesville play covers an area larger than the State of Maryland. While most recent industry activity is focused in San Augustine, Shelby, Panola and Harrison counties in Texas, and De Soto, Caddo, Red River, Bossier parishes in Louisiana, historical activity extends to Nacogdoches and Rusk counties and Sabine Parish as well. With the shale boom over the past decade and abundant domestic natural gas supply, prices have decreased significantly from nearly $13 in mid-2008 to $2–3 range in recent years. Similar to most active shale plays with marginal economics, activity dropped dramatically as gas prices went below $6 mcf. The rig count in Haynesville witnessed a significant decrease from about 250 rigs in 2010 to 25 in 2016, due in part to the commodity price decrease and industry refocusing attention from the Gulf Coast to low cost high return basins. Unlike the majority of basins that suffered post-2010 price collapse, the past 18 months have seen a resurgence in rig count and production rates in the Haynesville. Driving the resurgence is a realized lower price of entry and higher single well rates from application of newer drilling, completion and production techniques. The authors will highlight emerging trends seen over the last 18 months, such as longer laterals, next-gen hydraulic fracturing and increased quantities of sand. In this talk, we will review the evolution of geology and petrophysics and their direct relationship to completion & production techniques in Haynesville, including a localized case study. While the sweet spots were well-defined before 2016, completion techniques were not able to unlock the commercial rates required. As many operators have learned, you can’t frack your way out of bad rock, and you can’t make good rock better with bad fracks! The authors will explore economic metrics (e.g., transaction size, commodity price changes, general A&D activity) and investigate how the Haynesville play may continue to evolve growing forward.

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*Henry Hub Natural Gas Spot Price