

The Oklahoman

Northern Oklahoma oil field has growing potential

BY ADAM WILMOTH | Published: November 29, 2012

What began less than five years ago as a small oil field in northern Oklahoma has now grown into one of the largest and greatest-potential oil fields in the country, according to participants at the 2012 Mississippi Lime Congress in Oklahoma City this week.

“This play is huge,” said Julie Garvin, president of Houston-based Roxanna Oil Co. “If you think about all the potential extension, I’ve come up with about 20 million acres’ potential.”

Today, the Mississippi Lime play is believed to stretch from northwestern Oklahoma to Osage County and as far south as Logan County. Drilling activity is ongoing throughout much of western Kansas and into some parts of southwestern Nebraska.

Oil and natural gas producers have drilled through and around the Mississippi Lime for more than 100 years, but like many dense rock layers throughout the country, horizontal drilling and hydraulic fracturing have allowed producers to economically recover from rock that previously was not seen as profitable.

The first modern horizontal wells targeting the Mississippi Lime were drilled about five years ago. Drilling activity in the area picked up significantly in 2010.

Oklahoma City-based SandRidge Energy Inc. is the largest player in the field. Other large independent producers, including Oklahoma City-based Devon Energy Corp. and Chesapeake Energy Corp., also are active in the area.

The sprawling Mississippi Lime also supports many smaller operators.

“Because of the vast acreage, it has given opportunities for a lot of companies of different sizes to participate,” said Earl Reynolds, chief operating officer and executive vice president at Oklahoma City-based Chaparral Energy Inc.

Chaparral primarily uses water flooding and carbon dioxide injections to recover additional oil from several of the state’s oldest oil fields, including one in Osage County, where the company controls about 130,000 acres of leasehold.

After seeing the success of SandRidge and others in the area, Chaparral has drilled six test wells into the Mississippi Lime, which lies beneath the rocks it is currently producing.

“It is a very significant play that will be a material driver for growth in the U.S. for some time,” said Reynolds

Increased drilling in northern Oklahoma is part of an ongoing oil boom in the state. Drilling activity in the Cana Woodford formation in Western Oklahoma has led to renewed growth in Elk City and other communities.

Oklahoma City-based Continental Resources this fall announced that it is focusing much of its future drilling in what it calls the South Central Oklahoma Oil Province, or SCOOP, which stretches from Chickasha to Ardmore.

The Mississippi Lime has attracted producers because it is relatively thick and shallow, both of which can make drilling less expensive.

One challenge, however, is that the rock itself is highly variable, so one well may be a success while another nearby may not. Also, most of the rural drilling sites are in areas with limited or no access to electricity, natural gas pipelines and other infrastructure. While producers are still working to address some of the more technical challenges, they are hopeful the field’s success will continue.

“The Mississippi play is viewed as a — if not the — prime economic driver of the Oklahoma economy for the next several years,” said Bob Sullivan, a third-generation oilman and owner of Tulsa-based Sullivan and Co. “I’m counting on it to serve a fourth generation of Sullivans as well.”