

New techniques may be used to open up Niobrara shale

Oil companies line up

By MEAD GRUVER - Associated Press writer | Posted: Tuesday, April 6, 2010

CHEYENNE -- The state has approved all but four of 25 permits sought by three companies to drill oil wells in southeastern Wyoming, an area that has had little oil development.

Samson Oil and Gas USA Inc., EOG Resources Inc. and Jonah Gas Co. LLC sought the permits to drill horizontal oil wells in Laramie and Goshen counties.

The wells would be deep, ranging between 10,700 feet and 14,700 feet, to tap into the Niobrara shale formation.

Companies have up to a year to begin drilling after receiving a state permit. Some might choose to drill right away and see what happens, while others could first spend time mapping underground formations, said Wyoming Oil and Gas Supervisor Tom Doll.

"It's going to take a couple years for it to develop and really exploit the Niobrara shale," Doll said.

The Web site of the Oil and Gas Conservation Commission said the permits had been approved.

Seismic mapping has been under way in parts of Laramie County.

New techniques that have opened up North Dakota's Bakken shale to oil drilling in recent years could be used to open up the Niobrara shale beneath eastern Wyoming, said Terry Barr, president of Lakewood, Colo.-based Samson Oil and Gas.

"I think that the industry has recognized that the Niobrara has the ability to emulate what's happened in the Bakken," Barr said Monday.

The techniques include new methods of hydraulic fracturing in which pressurized water, sand and chemicals are used to break open rock and improve the flow of oil or natural gas.

Companies have developed new ways to target specific zones of horizontal well bores with hydraulic fracturing, Barr said.

Samson Oil and Gas USA received a state permit March 23 to drill one well northwest of Torrington in central Goshen County. The company hasn't applied for any other drilling in southeastern Wyoming but has experience drilling in the Bakken, Barr said.

Since early March, EOG Resources has applied for 20 well permits in central and northern Laramie County. Jonah Gas has applied for four permits in Goshen County.

The recent drilling of an oil well south of Cheyenne, just inside Colorado, shows promise: The well was producing 1,770 barrels a day, compared to 100 to 150 a day for most other oil wells in the area.