

Company taps new technology to seek oil in Chouteau County

By ERIC NEWHOUSE
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Oil exploration is increasing in Montana, with a Canadian firm staking out two new positions in Chouteau County, in addition to one north of Billings.

MegaWest Energy Corp. hopes to employ the new technology developed for the Bakken Field — horizontal drilling, plus fracturing the shale under intense pressure — in other areas.

"We have some old vertical wells where light oil had been obtained, and we're hoping that the new technology will boost our production," said Bill Thornton, chief operating officer of MegaWest in Calgary.

The company is planning new exploration in its Devils Basin project, a half-million-dollar gamble near Roundup in an area drilled nearly a century ago.

MegaWest bought drilling rights to 6,015 acres there in hopes of extracting light oil from a formation of Heath shale. Thornton said the formation is about 1,250 feet below the surface, but declined to specify the thickness of it.

According to the U.S. Geological Survey, Heath shale is an oil-bearing black shale that can be up to 500-feet thick. It outcrops in several places, including just east of the Big Snowy Mountains.

"The Heath is another shale considered to be a source of oil in many northern Montana fields, but it has rarely been productive," said Jim Halvorson of the

Montana Board of Oil and Gas.

"It's similar to the Bakken Field in terms of the fractured shale and the light oil, but it's further south and a lot closer to the surface," said George Stepleton, CEO of MegaWest in Houston.

Billings geologist Dick Findley is credited with developing the technology that allowed Prospector Oil to develop a huge new oil field in northeastern Montana.

Findley found oil trapped in a layer of dolomite shale about 10,000 feet below the surface in a 600-square-mile area that was explored years before.

He drilled vertically down to the shallow chamber, which is about 12-feet thick, and turned his drill head horizontal to tap into two or three shafts that are several thousand feet long.

After extracting his drill, Findley pumped a sand-lacked gel down the shaft at high pressure.

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The gel cracked the shale and the sand kept the cracks open, allowing oil to flow.

The new discovery made fortunes for many residents of northeastern Montana and doubled the state's oil production within the next few years.

The U.S. Geological Survey has estimated that the field contains between 3 billion and 4.3 billion barrels of oil.

It's generally credited as a major reason for the state's current \$400 million budget surplus.

With much of the Bakken exploration shifting across the border into North Dakota, MegaWest is exploring two

other areas further west.

One is the Teton River prospect about 10 miles west of Fort Benton, a 27,000-acre area under which the company believes it may be able to find 250 million barrels of what it calls "speculative oil resource," possibly associated with natural gas.

"The Teton play would be heavy oil from a field where there had been recovery in the mid '80s," said Thornton.

The other is the Loma prospect, which could contain 160 million barrels of oil in a 6,000-acre formation about 10 miles northeast of Fort Benton, according to the company.

"The Loma play is a more exploratory search for light oil," Thornton said. "We have a seismic team out there right now."

MegaWest owns all or part of the drilling rights on 125,000 acres in Montana, Kansas, Missouri, Kentucky and Texas.

Halvorson said EOG Resources began drilling a well July 11 on the border of Petroleum and Musselshell counties, seeking to explore how far the Bakken Field extends.

"But they'll be drilling their way through the Heath to get to the Bakken, so they'll be able to check it out," Halvorson said. "And that's about the only true wildcat we have working these days that I'm aware of."

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