STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITION OF TRENDWELL ENERGY, CORPORATION, FOR AN ORDER FROM THE SUPERVISOR OF WELLS FORMING A 200-ACRE TRENTON BLACK RIVER FORMATION DRILLING UNIT IN RAISINVILLE TOWNSHIP, MONROE COUNTY, MICHIGAN.	)	CAUSE NO. 19-2014

OPINION AND ORDER

This case involves the Petition of Trendwell Energy Company (Petitioner) to drill and complete the Jung 1-21 HD1 well for oil and gas exploration within a private claims drilling unit in the stratigraphic interval known as the Trenton Black River Formation. The Petitioner is requesting a nominal 200-acre drilling unit for the Jung 1-21 HD1 well as an exception to the 40-acre drilling unit size established by Supervisor's Order No. 18-2007. The Proposed Unit consists of that part of lots 39 and 42 of the Supervisors plat No. 1 of Raisinville Township, Monroe County, Michigan and being part of private claim No. 407, 484, 493, and 477 described as a parcel of land 1,830 feet wide in a SE-NW direction and 4,760 feet long in a NE-SW direction, containing 200 acres more or less. The four corners of the Proposed Unit are defined as follows.

Southwest corner: N=163470.36 feet (SD = 0.10'), E=13362670.61 feet (SD=0.10')
Lat. = 41.9451252, Long. = 83.4870391

Northwest corner: N=167892.22 feet (SD = 0.10'), E=13364432.65 feet (SD = 0.10')
Lat. = 41.9572077, Long. = 83.4803918

Northeast corner: N=167214.80 feet (SD = 0.10'), E=13366132.65 feet (SD = 0.10')
Lat. = 41.9552996, Long. = 83.4741688

Southeast corner: N=162792.94 feet (SD = 0.10'), E=13364370.61 feet (SD = 0.10')
Lat. = 41.9432175, Long. = 83.4808171

Jurisdiction

The development of oil and gas in this state is regulated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Michigan Compiled Laws 324.61501 *et seq*. The purpose of Part 615 is to ensure the orderly development and production of the oil and gas resources of this state. MCL 324.61502. To that end, the Supervisor may establish drilling units. MCL 324.61513(2). However, the formation of drilling units as an exception to general rule spacing can only be effectuated after an evidentiary hearing. 1996 MR 9, R 324.302. The evidentiary hearing is governed by the applicable provisions of the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 *et seq*. See 1996 MR 9, R 324.1203. The evidentiary hearing in this matter was held on December 16, 2014.

FINDINGS OF FACT

The Petitioner specifically requests that the Supervisor issue an Order that grants an exception to the drilling unit size established by Supervisor's Order No. 18-2007 by establishing the Proposed Unit as described above.

The Administrative Law Judge determined that the Notice of Hearing was properly served and published. No answers to the Petition were filed. Therefore, the Petitioner is the only party to this case. The Supervisor designated the hearing to be an uncontested evidentiary hearing pursuant to R 324.1205(1)(c) and directed evidence to be presented in the form of verified statements.

In support of its case, the Petitioner offered the verified statements of David R. Heinz, Vice President of Exploration, Trendwell Energy Corporation; J. Dean Geers, Professional Surveyor, Atwell LLC; and Richard Sandtveit, Vice President of Engineering, Trendwell Energy Corporation.

The spacing of wells in Monroe County private claims targeting the Trenton Black River Formation is governed by Supervisor's Order No. 18-2007. This Order establishes drilling units of 40 acres, more or less, in the form of a square, assembled

by combining two 20-acre parcels, each of which consist of the north and south, or east and west halves of a quarter-quarter section or of adjacent quarter-quarter sections. In areas of private claims where the governmental survey cannot be extended, Order No. 18-2007 states units shall only be established by hearing. Under Order No. 18-2007, it is presumed that one well will efficiently and economically drain the 40-acre drilling unit of hydrocarbons.

Mr. Geers stated the Proposed Unit lies entirely in an area of private claims and there are no immediately adjacent properties that are within a governmental survey grid that would allow for the extension of government survey lines into the private claims area where the proposed unit is located.

Mr. Sandtveit stated the Proposed Unit boundary lines lie parallel and perpendicular to the boundaries of the private claims which exist within the unit and the entire unit is under lease controlled by Petitioner. Mr. Sandtveit indicates waste will be prevented by drilling a horizontal well, as the number of wells drilled with the proposed unit will be minimized as will surface impacts. He further indicated the productive portion of the well will be more than 330 feet from the drilling unit boundaries at all points.

Mr. Heinz reviewed a seismic line across the Proposed Unit that shows bounding faults and characteristic "sags" of the Trenton Formation, which are attributable to fracturing and faulting and the potential presence of a hydrothermal dolomite reservoir or reservoirs. Mr. Heinz stated the Proposed Unit is underlain by the inferred Trenton Black River Formation reservoir. (Exhibit B and C to Mr. Heinz's verified statement). Mr. Heinz states that one horizontal well can drain the entire 200-acre drilling unit, thus eliminating the need to drill an unnecessary well and minimizing surface waste.

I find that formation of the Proposed Unit, as an exception to Order No. 18-2007, will prevent waste and protect correlative rights and, as such, is approved for the proposed Jung 1-21 HD1 well.

CONCLUSIONS OF LAW

Based on the Findings of Fact, I conclude, as a matter of law:

1. Spacing for wells drilled in Monroe County to the Trenton Black River Formation is 40 acres as set by Order No. 18-2007. Exceptions to Order No. 18-2007 and units in areas of private claims may be granted by the Supervisor after a hearing.
2. The Supervisor has jurisdiction over the subject matter and the persons interested therein.
3. Due notice of the time, place, and purpose of the hearing was given as required by law and all interested persons were afforded an opportunity to be heard. 1996 MR 9, R 324.1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and Conclusions of Law, the Supervisor determines that compulsory pooling to form a nominal 200-acre Trenton Black River Formation drilling unit is necessary to protect correlative rights and prevent waste by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. A nominal 200-acre Trenton Black River Formation drilling unit is established, as an exception to Order No. 18-2007, for the Jung 1-21 HD1 well comprising the following area: that part of lots 39 and 42 of the Supervisors plat No. 1 of Raisinville Township, Monroe County, Michigan and being part of private claim No. 407, 484, 493, and 477 described as a parcel of land 1830 feet wide in a SE-NW direction and 4760 feet long in a NE-SW direction, containing 200 acres more or less. The four corners of the Proposed Unit are defined as follows.

Southwest corner: N=163470.36 feet (SD = 0.10'), E=13362670.61 feet (SD=0.10')
Lat. = 41.9451252, Long. = 83.4870391

Northwest corner: N=167892.22 feet (SD = 0.10'), E=13364432.65 feet (SD = 0.10')
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Lat. = 41.9432175, Long. = 83.4808171

2. If the Jung 1-21 HD1 well is found to not effectively drain the drilling unit described in paragraph 1 above, the Operator may submit to the Supervisor, in writing, a request for administrative approval to drill an additional well without a hearing, provided the proposed well is not less than 330 feet from the unit boundary.
3. Production at the Jung 1-21 HD1 well shall be limited to 200 barrels of oil per day and/or 200 thousand cubic feet of gas per day.
4. All other provisions of Order No. 18-2007 shall remain in effect.
5. The Supervisor retains jurisdiction in this matter.
6. This Order shall be effective immediately.

DATED: Jan. 9, 2015

HAROLD R. FITCH
ASSISTANT SUPERVISOR OF WELLS
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