

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF

THE PETITION OF MERIT ENERGY COMPANY, FOR AN)
ORDER FROM THE SUPERVISOR OF WELLS)
APPROVING AN INCREASED ALLOWABLE SET BY) ORDER NO. 04-2017
SPECIAL ORDER NO. 1-73 FOR THE VERAGHEN 11-21)
HD1 WELL IN SECTION 21, CHESTER TOWNSHIP,)
OTSEGO COUNTY, MICHIGAN.)

ORDER OF DETERMINATION

This case involves the Petition of Merit Energy Company (Petitioner) for an Order from the Supervisor of Wells (Supervisor) to increase the amount of gas it may produce each day at the Veraghen 11-21 HD1 well to 750 thousand cubic feet (Mcf) of gas. Under Special Order No. 1-73, the Petitioner currently cannot produce more than 450 Mcf of gas per day at the Veraghen 11-21 HD1 well. The Veraghen 11-21 HD1 well is located in the SE 1/4 of NE 1/4 and NE 1/4 of SE 1/4 of Section 21, T30N, R2W, Chester Township, Otsego County, Michigan.

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. MCL 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 fix the total allowable production for any oil or gas field or pool in the state, and establish the allowable production for each well in the field or pool in order to prevent premature abandonment of wells in the field or pool. MCL 324.61512. However, a permittee of a well who believes proration allowables have ceased to prevent waste may petition the Supervisor for a change in a well allowable and the Supervisor shall schedule a meeting to consider the petition. 1996 MR 9, R 324.611. A meeting on this matter was scheduled to be held on October 11, 2017.

FINDINGS OF FACT

The Petitioner seeks an increase in the full gas allowable for the Veraghen 11-21 HD1 well in the SE 1/4 of NE 1/4 and NE 1/4 of SE 1/4 of Section 21, T30N, R2W, Chester Township, Otsego County, Michigan from 450 Mcf per well per day to 750 Mcf per well per day. No increase in the oil allowable of 300 barrels per well per day was requested. The current proration allowables were established by Special Order No. 1-73.

The Supervisor determined the Notice of Meeting was properly served and published. No answers to the Petition were filed. Therefore, the Petitioner is the only party to this matter. The Supervisor designated that evidence was to be presented in the form of written verified statements. In support of its case, the Petitioner offered the verified statement and subsequent supplemental verified statement of Ms. Eliza Ann Bornman, Operations Engineer for Merit Energy Company.

Ms. Bornman's verified statements indicate development of the Chester 21 reef began in the 1970s by Shell Western E&P Inc. (SWEPI). In 1981, the reef was waterflooded and the Chester 21 waterflood operations ceased in the early 1990s. The Veraghen 11-21 was drilled and completed in 2002 by SWEPI. The Veraghen 11-21 casing exit lateral wellbore was drilled and completed in 2013 by Merit Energy Company. In 2010, Merit Energy Company drilled and completed the OCRC 12-21, which was recompleted with a casing exit lateral in 2015. The OCRC 12-21A HD1 and the Veraghen 11-21 HD1 are the only two wells currently producing in the Chester 21 reef (Exhibit A to Ms. Bornman's verified statement). The Veraghen 11-21 HD1 80-acre drilling unit is located in the northern part of the reef, and the OCRC 12-21A HD1 is located in the southern part of the reef, therefore, it is Ms. Bornman's opinion that the Veraghen 11-21 HD1 will not interfere with production from the OCRC 12-21A HD1.

It is Ms. Bornman's opinion that at 450 MCF per day, production from the Veraghen 11-21 HD1 well is sporadic, inconsistent, inefficient, and has ceased to prevent waste (Exhibit D to Ms. Bornman's verified statement). She stated the well is in the depletion stage and the current allowable is no longer effective.

Ms. Bornman states the incremental gas produced at the requested increased

allowable rate of 750 MCF per day would provide energy and expansion for oil to produce. There is no concern for gas coning because the gas produced is gas coming out of solution. There should be no concern for water coning since the Chester 21 reef was waterflooded above the oil-water contact and previous wells in this reef produced at higher rates than the Veraghen 11-21 HD1 and did not experience water coning.

Ms. Bornman indicated data collected during a 30-day test at an allowable rate not to exceed 700 Mcf per day, supports the request for an increased allowable for the Veraghen 11-21 HD1 well as the increased allowable will result in more economical and efficient drainage of the unit area (Exhibits D and E).

Ms. Bornman believes the increased allowable will conserve the Gas Oil Ratio (GOR), thus allowing for a more consistent depletion of reservoir energy. In addition, the increased allowable will result in an increase in recoverable oil reserves. Exhibit F shows the forecast at the current allowable indicates the oil rate will decline on a gradual slope. Once the reservoir does not have enough pressure to maintain the allowable gas rate, the production drains at a higher decline.

Based on the foregoing, I find, as a Matter of Fact, the current gas allowable for the Veraghen 11-21 HD1 well has ceased to prevent waste. I find an increase of the gas allowable for the Veraghen 11-21 HD1 well to 750 Mcf of gas per day is reasonable.

CONCLUSIONS OF LAW

Based on the findings of fact, I conclude, as a matter of law:

1. The Supervisor may limit the amount of gas to be produced from the Veraghen 11-21 HD1 well to prevent waste by preventing the premature abandonment of the well. MCL 324.61512 and Special Order No. 1-73.
2. This order is necessary to make a change in the field allowable established in Special Order 1-73. 1996 AACS, R 324.611 and Special Order No. 1-78.

3. The Supervisor has jurisdiction over the subject matter and the persons interested therein.
4. 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 AACS, R 324.611 and 324.1204.

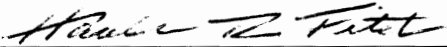
DETERMINATION AND ORDER

Based on the Findings of Fact and Conclusions of Law, the Supervisor of Wells determines that increasing the gas allowable for the Veraghen 11-21 HD1 well will prevent waste.

NOW, THEREFORE, IT IS ORDERED:

1. The proration provisions of Special Order No. 1-73, as they apply to gas production in the Veraghen 11-21 HD1 well, are hereby changed to 750 Mcf per day allowable. The daily allowable oil production shall remain unchanged at 300 barrels of oil per well per day.
2. The Supervisor of Wells retains jurisdiction in this matter.
3. This Order shall be effective immediately.

Dated: Dec. 19, 2017



HAROLD R. FITCH
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