

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITION OF WARD LAKE ENERGY FOR AN ORDER)
FROM THE SUPERVISOR OF WELLS ESTABLISHING AN 80-)
ACRE ANTRIM SHALE FORMATION DRILLING UNIT) CAUSE NO. 18-2008
CONSISTENT WITH ORDER NO (A) 14-9-94 BY COMPULSORY)
POOLING ALL INTERESTS INTO THE UNIT.)

OPINION AND ORDER

This case involves the Petition of Ward Lake Energy (Petitioner). The Petitioner proposes to drill and complete a well for oil and gas (the PCA B2-16 well) within a drilling unit in the stratigraphic interval known as the Antrim Shale Formation. Under Order No. (A) 14-9-94, as amended, the drilling unit size for an Antrim Shale Formation well is 80 acres. Since not all of the land owners within the proposed drilling unit have agreed to voluntarily pool their interest, the Petitioner seeks an Order of the Supervisor of Wells (Supervisor) designating Petitioner as operator of the drilling unit and requiring compulsory pooling of all tracts and interests within that geographic area for which the owners have not agreed to voluntary pooling.

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 in this State. MCL 324.61502. To that end, the Supervisor may establish drilling units and compulsorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the formation of drilling units by compulsory pooling of interests can only be effectuated after an evidentiary hearing. 1996 MR 9, R 324.302 and R 324.304. 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 June 24, 2008.

FINDINGS OF FACT

Petitioner specifically requests that the Supervisor issue an Order that:

1. Requires compulsory pooling of all tracts and mineral interests within the proposed drilling unit that have not agreed to voluntary pooling.
2. Names Petitioner as operator of the proposed drilling unit and the PCA B2-16 well
3. Authorizes Petitioner to recover certain costs and other additional compensation from the parties subject to the compulsory pooling order.

The Administrative Law Judge determined that the Notice of Hearing was properly served and published. No answers to the Petition were filed. Only the Petitioner's representative appeared at the hearing. 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 be presented in the form of verified statements.

In support of its case, the Petitioner offered the verified statements of Ms. Jennifer B. Hendrickson, Michigan District Landman, and Mr. David M. Elkin, Vice President of Engineering, EnerVest Operating LLC, as agent for Belden & Blake Corporation, doing business in Michigan as Ward Lake Energy.

I. DRILLING UNIT

The spacing of wells targeting the Antrim Shale Formation is governed by Order No. (A) 14-9-94, as amended. This Order establishes drilling units of 80 acres, more or less, consisting of two contiguous governmental surveyed quarter-quarter sections of land with one common boundary of approximately 1,320 feet, with allowances being made for the differences in the size and shape of sections.

Under Order No. (A) 14-9-94, as amended, it is presumed that one well will efficiently and economically drain the entire unit of hydrocarbons. The Petitioner's proposed drilling unit is described as the SE 1/4 of the NW 1/4 and SW 1/4 of NE 1/4 of Section 16, T23N, R15W, Bear Lake Township, Manistee County, Michigan. Mr. Elkin states the proposed drilling unit is constructed from two 40-acre quarter-quarter sections, adjoining on a 1,320-foot side, and therefore is consistent with Order No. (A) 14-9-94.

I find that the 80-acre proposed drilling unit is consistent with Order No. (A) 14-9-94, as amended, and, as such, is a proper drilling unit for the proposed well.

II. DRILLING UNIT OPERATOR

Ms. Hendrickson's verified statement indicates that the Petitioner owns or controls all of the oil and gas interests in the proposed 80-acre drilling unit, except for approximately 6.137 net mineral acres. Given this, the Petitioner seeks to be designated as the operator of the PCA B2-16 well. I find, as a Matter of Fact, the Petitioner is eligible to be designated operator of the PCA B2-16 well.

III. COMPULSORY POOLING

As found, the Petitioner has proposed a proper drilling unit for the Antrim Shale Formation but was unable to obtain the agreement of all owners to gain its full control. The Petitioner may not produce a well on the drilling unit without first obtaining the control of all the oil and gas interests. In cases like this, it is necessary for the Petitioner to request compulsory pooling from the Supervisor. As discussed, an owner who does not agree to voluntarily pool his or her interest in a drilling unit may be subject to compulsory pooling. 1996 MR 9, R 324.304. The compulsory pooling of an interest must be effectuated in a manner that ensures "each owner is afforded the opportunity to receive his or her just and equitable share of the production of the unit." *Id.* In addition to protecting correlative rights, the compulsory pooling must prevent waste. MCL 324.61502. An operator must first seek voluntary pooling of mineral interests within a proposed drilling unit prior to obtaining compulsory pooling through an Order of the Supervisor.

The Petitioner owns or controls all of the effective oil and gas leases in the proposed USP. The owners of the unleased 6.137 acres, as of the date of the hearing, are as follows:

<u>Name</u>	<u>Gross Acres</u>	<u>Net Acres</u>
James & Joy Babcock	20.5	1.879
Mary Lou Ware	20.5	1.879
Marvin Ware	20.5	1.879
John & Kathy Jurczak	40.0	0.5

Petitioner made numerous attempts to lease the above owners who had not yet voluntarily joined in the formation of a full drilling unit for purposes of drilling the PCA B2-16 well.

Based on the foregoing, I find, as a Matter of Fact:

1. The Petitioner was unable to voluntarily pool approximately 6.137 acres in the proposed 80-acre Antrim Shale formation drilling unit.

2. Compulsory pooling is necessary to form a full drilling unit, to protect correlative rights of uncommitted owners, and to prevent waste by preventing the drilling of unnecessary wells

Now that it has been determined compulsory pooling is necessary and proper in this case, the terms of such pooling must be addressed. When pooling is ordered, the owner of the compulsorily pooled lands (Pooled Owner) is provided an election on how he or she wishes to share in the costs of the project. R 324.1206(4) A Pooled Owner may participate in the project, or in the alternative be "carried" by the operator. If the Pooled Owner elects to participate, he or she assumes the economic risks of the project, specifically, by paying his or her proportionate share of the costs or giving bond for the payment. Conversely if a Pooled Owner elects not to participate, the Pooled Owner is, from an economic perspective, "carried" by the operator. Under this option if the well is a dry hole, the Pooled Owner has no financial obligation because they did not assume any risk. If the well is a producer, the Supervisor considers the risks associated with the proposal and awards the operator compensation, out of production, for assuming all of the economic risks.

In order for a Pooled Owner to decide whether he or she will "participate" in the well or be "carried" by the operator, it is necessary to provide reliable cost estimates. In this regard, the Petitioner must present proofs on the estimated costs involved in drilling, completing, and equipping the proposed well. Petitioner's Authorization for Expenditure (AFE) for the PCA B2-16 well itemizes the costs to be incurred in the drilling, completing, equipping, and plugging of the well (attached to the verified statement of David Elkin). The estimated costs are \$118,300 for drilling; \$161,000 for completion; and \$43,000 for equipping. The total estimated producing well cost for the PCA B2-16 well is \$322,300. Id.

Mr. Elkin stated he reviewed the costs set out in the AFE and believes them to be reasonable and appropriate. There is no evidence on this record refuting these estimated costs. I find, as a Matter of Fact, the estimated costs are reasonable for the purpose of providing the Pooled Owners a basis on which to elect to participate or be carried. However, I find actual costs shall be used in determining the final share of costs and additional compensation assessed against a Pooled Owner.

The next issue is the allocation of these costs. Part 615 requires the allocation to be just and equitable. MCL 324.61513(4). The Petitioner requests the actual well costs and production from the well to be allocated based upon the ratio of the number of surface acres in the tracts of the various Pooled Owners to the total number of surface acres in the drilling unit. Established

practices and industry standards suggest this to be a fair and equitable method of allocation of production and costs. Therefore, I find, as a Matter of Fact, utilizing acreage is a fair and equitable method to allocate to the various tracts in the proposed drilling unit each tract's just and equitable share of unit production and costs. However, I find that an owner's share in production and costs should be in proportion to their net mineral acreage.

The final issue is the additional compensation for risk to be assessed against a Pooled Owner who elects to be carried. The administrative rules under Part 615 provide for the Supervisor to assess appropriate compensation for the risks associated with drilling a dry hole, and the mechanical and engineering risks associated with the completion and equipping of wells. 1996 AACRS, R 324.1206(4)(b). Petitioner requests additional compensation of 200 percent for drilling, 200 percent for completing, and 200 percent for equipping costs. Mr. Elkin's verified statement indicates the proposed well has a fair amount of risk. From a mechanical standpoint, there is a risk of surface hole collapse when drilling through the glacial drift, as it consists of unconsolidated sand and gravel. In addition, due to variations in both the intensity of the local natural fracture network in the Antrim Shale (which cannot be predicted prior to drilling and completion) and the efficiency of the hydraulic fracturing process in connecting the well bore to those natural fractures, the well may not be economical to recover the costs of completion and equipping.

I find, as a Matter of Fact, the risk of the proposed PCA B2-16 well being a dry hole supports compensation from the Pooled Owners of 200 percent of the actual drilling costs incurred. The mechanical and engineering risks associated with the well support additional compensation of 200 percent of the actual completing, and 200 percent of the actual equipping costs incurred. Operating costs are not subject to additional compensation for risk.

CONCLUSIONS OF LAW

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

1. Petitioner was unable to voluntarily pool the interest of four mineral owners. The Supervisor may compulsorily pool all properties when pooling cannot be agreed upon. Compulsory pooling is necessary to prevent waste and protect the correlative rights of the Pooled Owners in the proposed drilling unit. MCL 324.61513(4).
2. This order is necessary to provide for conditions under which each mineral owner who had not voluntarily agreed to pool all their interest in the pooled unit may share in the working interest share of production. 1996 AACRS, R 324.1206(4).

- 3 The Petitioner is an owner within the drilling unit and therefore is eligible to drill and operate the PCA B2-16 well. 1996 AACS, R 324.1206(4)
- 4 The Supervisor may authorize Petitioner to take from each nonparticipating interest's share of production the cost of drilling, completing, equipping, and operating the well, plus an additional percentage of the costs as identified in the Determination and Order section of this Order for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of the well.
1996 AACS, R 324.1206(4)
- 5 The applicable spacing for the proposed drilling unit is 80 acres, as established by Order No. (A) 14-9-94, as amended.
- 6 The Supervisor has jurisdiction over the subject matter and the persons interested therein.
- 7 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 1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and the Conclusions of Law, the Supervisor determines that compulsory pooling to form an 80-acre Antrim Shale Formation drilling unit is necessary to protect correlative rights and prevent waste caused by the drilling of unnecessary wells

NOW, THEREFORE, IT IS ORDERED:

- 1 An 80-acre Antrim Shale Formation drilling unit is established for the following area: SE 1/4 of the NW 1/4 and SW 1/4 of NE 1/4 of Section 16, T23N, R15W, Bear Lake Township, Manistee County, Michigan All properties, parts of properties, and interests in this area are pooled into the drilling unit. This pooling is for the purpose of forming a drilling unit only and neither establishes a right, nor diminishes any independent right, of the Petitioner to operate on the surface or subsurface lands of a Pooled Owner.
- 2 Each Pooled Owner shall share in production and costs in the proportion that their net mineral acreage in the drilling unit bears to the total acreage in the drilling unit.

- 3 The Petitioner is named Operator of the PCA B2-16 well. The Operator shall commence the drilling of the PCA B2-16 well within 90 days of the effective date of this Order, or the compulsory pooling authorized in this Order shall be null and void as to all parties and interests. This pooling Order applies to the drilling of the PCA B2-16 well only
- 4 A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of their interest owned in the drilling unit. The Pooled Owner is considered to hold a 1/8 royalty interest, which shall be free of any charge for costs of drilling, completing, or equipping the well, or for compensation for the risks of the well, or operating the proposed well including postproduction costs.
- 5 A Pooled Owner shall have ten days from the effective date of this Order to select one of the following alternatives and advise the Supervisor and the Petitioner, in writing, accordingly:
 - a. To participate, then within ten days of making the election, pay to the Operator, the Pooled Owner's share of the estimated costs for drilling, completing, and equipping the well, or give bond to the Operator for the payment of the Pooled Owner's share of such cost promptly upon completion; and authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production, the Pooled Owner's share of the actual costs of operating the well; or
 - b. To be carried, then if the well is put on production authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production:
 - (i) The Pooled Owner's share of the actual cost of drilling, completing, and equipping the well
 - (ii) An additional 200 percent of the actual drilling costs, 200 percent of the actual completion costs, and 200 percent of the actual equipping costs attributable to the Pooled Owner's share of production, as compensation to the Operator for the risk of a dry hole.
 - (iii) The Pooled Owner's share of the actual cost of operating the well.
- 6 In the event the Pooled Owner does not notify the Supervisor in writing of the decision within ten days from the effective date of this Order, the Pooled Owner will be deemed to have elected the alternative described in ¶5(b). If a Pooled Owner who elects the alternative in ¶5(a) does not, within ten days of making their election, pay their proportionate share of costs or give bond for the payment of such share of

such costs, the Pooled Owner shall be deemed to have elected the alternative described in ¶5(b) and the Operator may proceed to withhold and allocate proceeds for costs from the Pooled Owners' 7/8 share of production as described in 5 b (i), (ii) and (iii)

- 7 For purposes of the Pooled Owners electing alternatives, the amounts of \$118,300 for estimated drilling costs (dry hole costs); \$161,000 for estimated completion costs; and \$43,000 for estimated equipping costs are fixed as well costs. Actual costs shall be used in determining the Pooled Owner's final share of well costs and in determining additional compensation for the risk of a dry hole. If a Pooled Owner has elected the alternative in ¶5(a) and the actual cost exceeds the estimated cost, the Operator may recover the additional cost from the Pooled Owners' 7/8 share of production. Within 60 days after commencing drilling of the well, and every 30 days thereafter until all costs of drilling, completing, and equipping the well are accounted for, the Operator shall provide to the Pooled Owner a detailed statement of actual costs incurred as of the date of the statement and all costs and production proceeds allocated to that Pooled Owner.
- 8 The Operator shall certify to the Supervisor that the following information was supplied to each pooled owner no later than the effective date of the Order:
 - a. The Order;
 - b. The AFE; and
 - c. Each Pooled Owner's percent of charges from the AFE if the Pooled Owner were to choose option "a" in Paragraph 5, above
9. The Supervisor retains jurisdiction in this matter.
10. The effective date of this Order is Aug. 25, 2008

DATED: Aug. 15, 2008


HAROLD R. FITCH
ASSISTANT SUPERVISOR OF WELLS
Office of Geological Survey
P.O. Box 30256
Lansing, MI 48909

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
SUPERVISOR OF WELLS

IN THE MATTER OF

THE PETITION OF WARD LAKE ENERGY FOR AN ORDER)
FROM THE SUPERVISOR OF WELLS ESTABLISHING AN)
80-ACRE ANTRIM SHALE FORMATION DRILLING UNIT) CAUSE NO. 18-2008
CONSISTENT WITH ORDER NO. (A) 14-9-94 BY)
COMPULSORY POOLING ALL INTERESTS INTO THE)
UNIT.)

NOTICE OF HEARING

Take notice that a contested case hearing will be held before the Supervisor of Wells (Supervisor) in the city of Lansing, Michigan, on the TWENTY-FOURTH DAY OF JUNE (JUNE 24) 2008, BEGINNING AT 2:00 P.M., OR AS SOON THEREAFTER AS MAY BE HEARD, IN THE DEPARTMENT OF ENVIRONMENTAL QUALITY TOM DOWNS HEARING ROOM, ATRIUM LEVEL, SOUTH TOWER, CONSTITUTION HALL, 525 WEST ALLEGAN STREET, LANSING, MICHIGAN. The hearing will be conducted pursuant to Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); MCL 324.61501 et seq., the administrative rules, 1996 AACS, 2001 MR 2, 2002 MR 23, R 324.101 et seq., and the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 et seq.; MSA 3.560(101) et seq.

The hearing is for the purpose of receiving testimony and evidence pertaining to the need or desirability of issuing an order in the matter of the petition of Ward Lake Energy (Petitioner), 685 East M-32, P.O. Box 1663, Gaylord, Michigan 49734.

Petitioner seeks an order of the Supervisor, pursuant to R 324.302 to establish an 80-acre drilling unit consistent with Order No. (A) 14-9-94, and pursuant to R 324.304 to compulsory pool all interests into the proposed unit. The proposed drilling unit consists of the SE 1/4 of NW 1/4 and SW 1/4 of NE 1/4 of Section 16, T23N, R15W, Bear Lake Township, Manistee County, Michigan.

You can obtain a copy of the written petition by requesting one in writing from Ms. Jennifer B. Hendrickson, P.O. Box 1663, Gaylord, Michigan 49734, telephone number 989-732-8499.

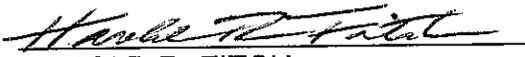
Take note that if you wish to participate as a party in the hearing by presenting evidence or cross-examining witnesses, you shall prepare and mail or otherwise deliver to the petitioner and Supervisor, not less than 5 days before the hearing date, an answer to the petition in the manner set forth in R 324.1204(6). Proof of mailing or delivering the

answer shall be filed with the Supervisor on or before the date of the hearing. The answer shall state with specificity the interested person's position with regard to the petition. Failure to prepare and serve an answer in a timely manner shall preclude you from presenting evidence or cross-examining witnesses at the hearing. If an answer to the petition is not filed, the Supervisor may elect to consider the petition and enter an order without oral hearing. Mail the answer to the petition to Ms. Jennifer B. Hendrickson at the above address, and to the Supervisor in care of the Assistant Supervisor of Wells, Mr. Harold R. Fitch, Office of Geological Survey (OGS), P.O. Box 30256, Lansing, Michigan 48909-7756.

Take further note that you may request a change in the location of the hearing to the county in which the proposed drilling unit is located. If the majority of the owners of the oil and gas rights, which are listed in the Petition as not voluntarily pooling their interests into the proposed drilling unit, include in their timely filed answers a request to hold the hearing in the county where the proposed drilling unit is located, the Assistant Supervisor of Wells shall: (i) at the time and place scheduled in this notice adjourn the scheduled hearing; (ii) reschedule the hearing for a location in such county, and (iii) provide, by first-class mail, notice of the rescheduled hearing date, time, and place prior to the rescheduled hearing date to all persons who filed an answer in response to this notice.

Questions regarding Notice of Hearing should be directed to Ms. Susan Maul, OGS, Michigan Department of Environmental Quality, P.O. Box 30256, Lansing, Michigan 48909-7756, phone 517-241-1552. Persons with disabilities needing accommodations for effective participation in this hearing should call or write Ms. Maul at least a week in advance of the hearing date to request mobility, visual, hearing, or other assistance.

Dated: *May 23, 2008*


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