STATE OF MICHIGAN

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITION OF TRENDWELL ENERGY CORPORATION FOR AN ORDER FROM THE SUPERVISOR OF WELLS ESTABLISHING A UNIFORM SPACING PLAN CONSISTENT WITH ORDER NO. (A) 14-9-94 AND COMPULSORY POOLING ALL INTERESTS INTO THE UNIT LOCATED IN MILTON TOWNSHIP, ANTRIM COUNTY, MICHIGAN.	) ORDER NO. 08-2010

OPINION AND ORDER

This case involves the Petition of Trendwell Energy Corporation (Petitioner). The Petitioner proposes to establish a Uniform Spacing Plan (USP) in the stratigraphic interval known as the Antrim Shale Formation and to drill up to 13 wells within the USP. Order No. (A) 14-9-94, as amended, provides for the establishment of USPs for greater flexibility in locating Antrim Shale Formation wells. Since not all of the mineral owners within the proposed USP have agreed to voluntarily pool their interests, the Petitioner seeks an Order of the Supervisor of Wells (Supervisor) designating Petitioner as operator of the USP 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 or USPs and compulsorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the compulsory pooling of interests can only be effectuated after an evidentiary hearing. MCL 324.61516(1). 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 April 20, 2010.

FINDINGS OF FACT

Petitioner specifically requests that the Supervisor issue an Order that:

1. Establishes a USP of approximately 1,040 acres consisting of the following tracts of land in Milton Township, Antrim County, Michigan:

   T29N, R8W

   Section 6: NW 1/4 and N 1/2 of SW 1/4.

   T30N, R8W

   Section 31: S 1/2 of SW 1/4.

   T29N, R9W

   Section 1: E 1/2 of E 1/2, SW 1/4 of SE 1/4, NW 1/4, and W 1/2 of SW 1/4.

   Section 2: SE 1/4 of SE 1/4.

   Section 11: NE 1/4 of NE 1/4.

   Section 12: NW 1/4 of NW 1/4.

   T30N, R9W

   Section 36: W 3/4 of S 1/2 of S 1/2 and SE 1/4 of SE 1/4.
2. Names Petitioner as operator of the proposed USP.
3. Pools all tracts and mineral interests within the proposed USP that have not agreed to voluntary pooling.
4. 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. An answer to the Petition was filed by Jordan Development Company and various related parties (Jordan). Therefore, Petitioner and Jordan are the only parties to this case. The Supervisor designated the hearing to be an evidentiary hearing pursuant to R 324.1205(1)(b) and directed evidence be

presented in the form of oral testimony on April 1, 2010. At the request of the parties, the hearing was rescheduled and held on April 20, 2010.

In support of its case, the Petitioner offered the oral testimony of Mr. Richard Sandtveit, Vice President of Engineering, and Mr. Richard Collins, Vice President of Land and Business Development, Trendwell Energy Corporation. Petitioner also offered the testimony of Kevin Hackert and Joan Gardner, independent contractors, by verified statement. Jordan offered the oral testimony of Benjamin Brower, Vice President, and William Quinlan, Production and Engineering Manager, Jordan Exploration Company.

I. Formation of USP

The spacing of wells targeting the Antrim Shale Formation is governed by Order No. (A) 14-9-94, as amended. This Order allows for wells to be developed on a project basis through USPs formed by combining blocks of 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 as indicated by official governmental survey plats. In addition, a USP shall have a well density within the USP of no less than 80 acres per well, the distance between bottom hole locations of wells shall be no less than 1,320 feet, and the bottom hole locations of wells no closer than 330 feet from the USP boundary. Under Order No. (A) 14-9-94, as amended, it is presumed that one well will efficiently and economically drain an 80-acre area. The Petitioner's proposed USP is described as set forth in Findings of Fact No. 1 above (Exhibit 2).

Mr. Sandtveit testified the proposed USP is comprised of quarter-quarter sections of land with one common boundary of 1,320 feet, and that all lands are reasonably underlain by productive Antrim Shale Formation and will be drained by the wells Petitioner proposes to drill. He also testified that no well bottom hole location will be closer than 330 feet from the USP boundary, and the well bottom hole locations are at least 1,320 feet apart.

Mr. Sandtveit testified three wells have been drilled to date and Petitioner proposes to drill up to 10 additional wells within the proposed USP (Exhibit 15). Well density in the proposed 1,040-acre USP would be no less than 80 acres per well.

Mr. Sandtveit also testified the 40-acre parcel of land legally described as the SE 1/4 of SE 1/4 of Section 36, T30N, R9W (Tracts 36-3, 36-4, and 36-5), which is entirely subject to oil and gas leases held by Jordan, is included in an 80-acre drilling unit for which Jordan has obtained a drilling permit. Jordan has objected to the inclusion of Tracts 36-3, 36-4, and 36-5 in the proposed USP.

As Tracts 36-3, 36-4, and 36-5 are included in an 80-acre drilling unit for which a drilling permit has been issued, it is presumed under Order No. (A) 14-9-94, as amended, that a well drilled by Jordan within the approved drilling unit will efficiently and economically drain this parcel. I find that Tracts 36-3, 36-4, and 36-5 should not be included within the proposed USP for the purpose of sharing in production and costs within the proposed USP.

Exclusion of Tracts 36-3, 36-4, and 36-5 from the proposed USP creates a gap between the otherwise contiguous blocks of governmental surveyed quarter-quarter sections of land with one common boundary of approximately 1,320 feet included in the proposed USP. So that Petitioner may operate all other tracts as part of one USP rather than two or more, Petitioner requested, as an alternative to its original proposal, an exception be granted to the requirement of Order No. (A) 14-9-94 that a USP consist of contiguous 40-acre building blocks sharing a common side.

Mr. Sandtveit testified that by operating the proposed area as one USP, rather than two, Petitioner will avoid having to install additional metering and the telecommunication equipment associated with such metering, avoid duplicative administrative costs related to sales and marketing of production, and avoid additional regulatory reporting for the same. He further testified that by having one USP, Petitioner will have greater flexibility in locating Antrim Shale Formation wells and facilities and will be better able to minimize the number of associated surface facilities.

I find an exception to Order No. 14-9-94, as amended, should be granted authorizing the operation of the proposed USP (less Tracts 36-3, 36-4, and 36-5) as a single USP. Order No. (A) 14-9-94, as amended, recognizes the benefit of combining multiple single well drilling units to develop Antrim gas projects, to allow for drilling location flexibility, reduction of the number of surface facilities, and greater flexibility in locating surface locations so as to minimize surface disturbance.

By excluding Tracts 36-3, 36-4, and 36-5 from the proposed USP, the well density for the proposed USP would be greater than one well per 80 acres if Petitioner were to drill all 13 wells as originally proposed. Mr. Sandtveit indicated Petitioner will drill no more than nine new wells, in addition to the three existing wells in the modified USP area. Mr. Sandtveit also testified that the NW 1/4 of NW 1/4 of Section 12, T29N, R9W (Tracts 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, and 12-7) will not be included in the revised USP area. Petitioner has, subsequent to the hearing, submitted a modified project plan depicting the revised USP area, excluding Tracts 36-3, 36-4, and 36-5 and Tracts 12-1, 12-2, 12-3, 12-4, 12-5, 12-6, and 12-7. The project plan depicts locations for up to 12 wells. The area of the revised USP is 960 acres, resulting in a well density of no less than 80 acres per well.

I find the revised USP as described below constitutes a proper USP under Order No. (A) 14-9-94, as amended:

T29N, R8W
Section 6: NW 1/4 and N 1/2 of SW 1/4.
T30N, R8W
Section 31: S 1/2 of SW 1/4.
T29N, R9W
Section 1: E 1/2 of E 1/2, SW 1/4 of SE 1/4, NW 1/4, and W 1/2 of SW 1/4.
Section 2: SE 1/4 of SE 1/4.
Section 11: NE 1/4 of NE 1/4.
T30N, R9W
Section 36: W 3/4 of S 1/2 of S 1/2.

II. USP Operator

Mr. Sandtveit's testimony indicates that the Petitioner owns or controls all of the oil and gas interests in the proposed revised 960-acre USP except for approximately 90.21 acres of unleased mineral interests or mineral interests leased to Jordan. Given this, the Petitioner seeks to be designated as the operator of the proposed USP. I find,

as a Matter of Fact, the Petitioner is eligible to be designated operator of the proposed USP.

III. Compulsory Pooling

As found, the Petitioner has proposed a proper USP 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 within a USP 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. MCL 324.61513(4). The compulsory pooling of an interest must be effectuated in a manner that "will afford to the owner of each tract... the opportunity to recover or receive his or her just and equitable share of the oil or gas and gas energy in the pool..." 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 owners of the 90.21 acres not subject to oil and gas leases owned or controlled by Petitioner are as follows:

Tract	Name	Brief Legal Description	Gross Acres	Net Acres
31-2	Michael J. and Sheila M. Paradis–Jordan Dev. Co. (Lessee)	PRT SE 1/4 of SW 1/4, Sec. 31, T30N, R8W	0.69	0.69
31-3	Harold W. and Mandy K. Bryant, III, Almerica Mortgage Corp., Northwestern Mortgage Co. - Jordan Dev. Co (Lessee)	PRT SW 1/4 of SW 1/4; Sec. 31; T30N-R8W	5.01	5.01
1-1	Glenn M. and Sandra E. Paradis, Michigan Department of Natural Resources and Environment – Jordan Dev. Co. (Lessee)	PRT SW/4 of SW/4; Sec. 1; T29N-R9W	22.50	22.50
16-1	Michael J. Paradis, Alden State Bank, Northwestern Bank – Jordan Dev. Co (Lessee)	PRT W 3/4 of S 1/2 of S 1/2; Sec. 36; T30N-R9W	33.0700	33.0700
16-3	Donna Jean Cook (Paradis) - Jordan Dev. Co. (Lessee)	PRT SW 1/4 of SW 1/4; Sec. 36; T30N-R9W	2.6600	2.6600
16-6	Homer Waring	PRT W 3/4 of S 1/2; Sec. 36; T30N-R9W	0.2700	0.2700

Tract	Name	Brief Legal Description	Gross Acres	Net Acres
18-2	Donald and Sherry Redman, Lucille Redman (Life Estate unleased), Sprint Funding Corporation - Jordan Dev. Co (Lessee)	PRT SE 1/4 of SE 1/4; Sec. 2; T29N-R9W	10.0000	10 0000
18-3	Chris W. Stanley, Flagstar Bank, FSB, Huntington National Bank, TBA Credit Union – Jordan Dev. Co. (Lessee)	PRT SE 1/4 of SE 1/4; Sec. 2; T29N-R9W	3.0400	3 0400
18-5	Aaron and Traci D Joseph, John Adams Mortgage Company, Summit Mortgage Corporation – Jordan Dev. Co (Lessee)	PRT SE 1/4 of SE 1/4; Sec 2; T29N-R9W	2.4000	2 4000
18-6	Daniel M. Marker, M & T Mortgage Corp – Jordan Dev. Co. (Lessee)	PRT SE 1/4 of SE 1/4; Sec. 2; T29N-R9W	2 5000	2.5000
11-3	Bruce F and Mary K. Otte, Freemont Investment & Loan	PRT NE 1/4 of NE 1/4; Sec. 11; T29N, R9W	3 0500	3 0500
11-6	Benjamin and Tricia Tollenaar, Flagstar Bank, FSB, JP Morgan Chase Bank, NA	PRT NE 1/4 of NE 1/4; Sec. 11; T29N, R9W	4.4898	1.4966
11-7	Melina S. and Shawn Schaub, Option One Mortgage Corporation	PRT NE 1/4 of NE 1/4; Sec. 11; T29N, R9W	4 4898	1 4967
11-8	William D. and Deborah-Lynn Gamelin, Home Loan Center, Inc., Huntington National Bank	PRT NE 1/4 of NE 1/4; Sec. 11; T29N, R9W	4.4898	1.4967
11-9	Milton Township– Jordan Dev. Co (Lessee)	PRT NE 1/4 of NE 1/4; Sec. 11; T29N, R9W	0 5300	0 5300
TOTAL			99.19	90 21

Petitioner submitted the verified statements of Mr. Kevin Hackert and Ms. Joan Gardner regarding their efforts to negotiate oil and gas leases for those tracts identified above which are not subject to leases with Jordan. The verified statements indicate that after numerous verbal and written contacts with the owners, Petitioner has been unable to negotiate oil and gas leases. Petitioner has offered terms equal to or better than the offers made to other lease owners in the USP.

Mr. Richard Collins testified with regard to Petitioner's efforts to reach an agreement with Jordan to obtain a voluntary unit covering the oil and gas interests owned by Jordan within the proposed USP boundaries. Mr. Collins testified that there had been numerous discussions between Petitioner and Jordan in 2009 and 2010 in an attempt to reach an agreement regarding Jordan's leasehold interests within the proposed USP. He stated the specific tracts in which Jordan holds leases within the proposed USP and additional parcels subject to Jordan leases were a part of the overall discussions between Petitioner and Jordan (Exhibits 18 -20).

Mr. Brower testified further regarding the discussions between Petitioner and Jordan. He stated Jordan had never been shown a map or otherwise provided a description of the exact outline of Petitioner's proposed USP and proposed well locations.

In order to invoke the Supervisor's compulsory pooling authority, Petitioner must show that there were efforts made to voluntarily obtain agreement with Jordan and that those efforts failed. Based on the record, I find Petitioner made a reasonable, albeit unsuccessful, effort to obtain Jordan's agreement.

Jordan objects to inclusion of certain tracts in the USP in which it holds a leasehold interest on the basis that the language of Order No. (A) 14-9-94 authorizes only the pooling of unleased mineral interests. None of these tracts are located in an approved 80-acre drilling unit or approved USP. Jordan does not otherwise dispute the authority of the Supervisor to compulsorily pool leasehold interests into standard drilling units pursuant to the compulsory pooling authority set forth in Part 615.

MCL 324.61513(4) authorizes pooling in the context of "a uniform spacing plan or proration or drilling unit." It also authorizes the pooling of "properties or parts of properties." Administrative Rule R 324.304 refers to the pooling of "tracts or mineral interests." Order No. (A) 14-9-94, as amended, contains no discussion or analysis from which it can be concluded that it was the intent of the Order to otherwise limit the Supervisor's authority to compulsorily pool leased interests. If the Supervisor does not have the authority to pool leased interests into a USP, the result will be either that an operator will compulsorily pool such leased interests into individual 80-acre drilling units, or that such interests are not pooled or otherwise included in a development unit. The former scenario is contrary to the intent and purpose of the USP concept approved in Order No. (A) 14-9-94, as amended. The latter scenario is not only contrary to Order No. (A) 14-9-94, but may lead to the drilling of otherwise unnecessary wells or creation of islands of undevelopable lands or interests which is contrary to Order No. (A) 14-9-94, as amended, and is not protective of correlative rights.

I find that the Supervisor does have the authority to pool leased interests into a USP. To limit the pooling of leased tracts into the USP would be contrary to Order (A) 14-9-94's goal of flexibility for development of Antrim Shale Formation wells.

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

1. The Petitioner was able to voluntarily pool all but approximately 90.21 net mineral acres in the 960-acre proposed USP.
2. Compulsory pooling is necessary to form a USP, 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 (or lessee if subject to a lease) 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 of the estimated costs involved in drilling, completing, and equipping the proposed well. Petitioner submitted an Authorization for Expenditure (AFE) that itemizes the costs to be incurred in the drilling, completing, equipping, and plugging of one of the proposed wells (Exhibit 9). Mr. Sandtveit's testimony indicates that the costs were based on Petitioner's experience in drilling, completing, and equipping other Antrim wells. The AFE provides that the estimated costs for one well are: $138,200.00[1] for drilling, $189,000.00 for completion, and $158,400.00 for equipping, for a total cost of $485,600.00.

[1] Drilling costs on Exhibit 8 were listed as $138,400 but in fact added up to $138,200

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 net mineral acres in the tracts of the various Pooled Owners to the total number of mineral acres in the USP. Mr. Sandtveit's testimony and Exhibit 5 indicate the USP is underlain by the inferred Antrim Shale Reservoir; and therefore, allocation on a net mineral acreage basis is fair and equitable. It is Petitioner's intent that the Pooled Owners share in the allocation of costs and production from all wells in the USP.

I find, as a Matter of Fact, an owner's share in production and costs should be in proportion to their net mineral acreage in the USP. I further find the Pooled Owners shall share in the production and costs of all wells drilled in the USP, including all costs and production to date and in the future for the three wells already drilled in the proposed USP, and of all wells subsequently drilled within the proposed USP.

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 AACS, R 324.1206(4)(b). Petitioner requests additional compensation of 200 percent for drilling, 200 percent for completing, and 200 percent for equipping costs for the proposed wells for costs incurred after the effective date of this Order.

Mr. Sandtveit's testimony indicates the presence of a producible Antrim interval can only be proven by the drilling of wells and that the proposed wells have a fair amount of risk. In addition, due to variations in both the intensity of the local 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 bores to the

natural fractures, a well may not be economical and may not recover the costs of completion and equipping. Mr. Sandtveit testified that numerous Antrim production wells have been drilled on nearby lands and have been producing gas from the Antrim formation for an extended period of time. This historical production activity may have resulted in the reduction of bottom hole pressures which could affect the producibility of the proposed wells and drainage of gas reserves from Petitioner's leasehold areas.

Mr. Sandtveit testified that due to glacial scouring, the amount of potentially productive Antrim Shale Formation which exists in the area of the proposed USP may be reduced, thus increasing the potential risk for wells in such areas (Exhibits 10-13). Based on Petitioner's analysis, a portion of the Antrim Shale Formation lying above the Lachine Shale member and referred to generally as the "Upper Lachine" was demonstrated to be a potentially productive area based upon the drilling and completion of nearby wells (Exhibits 12 and 13). However, due to glacial scouring in certain areas, certain Antrim Shale Formation wells were not able to be completed so as to be able to produce from this otherwise productive portion of the formation.

Mr. Quinlan testified that based on Jordan's experience in drilling and producing Antrim Shale Formation wells in the area, it was Jordan's view that the risk of drilling a dry hole or an uneconomic well was very low. He disagreed with Petitioner's assessment of the risk due to the potential of glacial scouring. Mr. Quinlan further testified his analysis indicates that, despite the evidence of scouring, potentially productive Antrim Formation remains in all areas (Exhibits R-4 and R-9).

Mr. Quinlan further testified that based on a comparison of production to date from Petitioner's wells along with production from Jordan wells drilled in its Milton Bradley Units, it appeared that Petitioner's wells were producing in a manner similar to the early development of the Jordan wells (Exhibits R-5, R-6, and R-7). He used a cash flow analysis (Exhibit R-8) to show that Petitioner's proposed wells would be economic to develop. Therefore, Jordan's position is that no additional compensation for risk should be assessed against the Pooled Owner who elects to be carried.

Based on the testimony submitted in this matter, I find, as a Matter of Fact, the risk of drilling wells in the proposed USP supports compensation from the Pooled Owners of 200 percent of the actual drilling costs incurred. The mechanical and

engineering risks associated with the proposed wells supports additional compensation of 200 percent of the actual completing and 200 percent of the actual equipping costs incurred. The additional compensation shall apply to such drilling, completing, and equipping costs as are incurred after the effective date of this Order

CONCLUSIONS OF LAW

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

1. Petitioner was unable to voluntarily pool the interests of various 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 USP. 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 AACS, R 324.1206(4).

3. The Petitioner is an owner within the USP and therefore eligible to drill and operate wells within the USP. 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 wells, 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 wells.
1996 AACS, R 324.1206(4).

5. The applicable spacing for the proposed USP is a well density of no less than 80 acres per well, as established by Order No. (A) 14-9-94, as amended. The basis for determining well density is 960 acres.

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 a 960-acre Antrim Shale Formation USP is necessary to protect correlative rights and prevent waste caused by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. A 960-acre Antrim Shale Formation USP, referred to as the Maplehurst USP, is established for the following area:

Section 6: NW 1/4 and N 1/2 of SW 1/4.
T29N, R8W, Milton Township, Antrim County.
Section 31: S 1/2 of SW 1/4.
T30N, R8W, Milton Township, Antrim County.
Section 1: E 1/2 of E 1/2, SW 1/4 of SE 1/4, NW 1/4, and W 1/2 of SW 1/4.
Section 2: SE 1/4 of SE 1/4.
Section 11: NE 1/4 of NE 1/4.
T29N, R9W, Milton Township, Antrim County.
Section 36: W 3/4 of S 1/2 of S 1/2.
T30N, R9W, Milton Township, Antrim County, Michigan.

All properties, parts of properties, and interests in this area are pooled into the USP. This pooling is for the purpose of forming a USP 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 USP bears to the total mineral acreage in the USP. Each Pooled Owner shall share in all production to date from and in all costs incurred to date for the three wells already drilled in the USP, and in all future production and costs for those wells, and in all production from and costs of all wells subsequently drilled within the USP.

3. The Petitioner is named Operator of the USP. Within two years from the effective date of this Order, if the Maplehurst USP is not developed substantially in accordance with the project plan as submitted, the Supervisor may require Petitioner to submit technical data which supports a conclusion that the USP can be adequately drained by the existing development.

4. Establishment of this USP is not to be taken as approval of individual well permits within the USP.

5. A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of their interest owned in the USP. The Pooled Owner is considered to hold a 1/8 royalty interest on their interest owned in the USP, which shall be free of any charge for the costs of drilling, completing, equipping, or operating the proposed wells, or for compensation for the risks of the wells.

6. 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 actual costs for drilling, completing, and equipping the nine wells already drilled, plus the estimated costs for drilling, completing, and equipping the

proposed wells or give bond for the payment of the Pooled Owner's share of such costs promptly upon receipt of an invoice for each proposed well, and authorize the Operator to take from 7/8 of the Pooled Owner's share of production, the Pooled Owner's share of the actual costs of operating all the wells. The Operator shall invoice the Pooled Owner for its share of the estimated drilling, completing, and equipping costs for each proposed well on or before 30 calendar days prior to the estimated commencement of drilling of each well. The Pooled Owner shall pay the invoice or give bond on or before five calendar days before the estimated drilling commencement date of each well; or

b. To be carried, then authorize the Operator to take from 7/8 of the Pooled Owner's share of production:

(i) The Pooled Owner's share of the actual cost of drilling, completing, and equipping all wells;

(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, and the mechanical and engineering risks associated with the completion and equipping of all future wells; and

(iii) The Pooled Owner's share of the actual cost of operating the wells.

7. In the event the Pooled Owner does not notify the Supervisor and the Petitioner 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 Paragraph 6.b. If a Pooled Owner who elects the alternative in Paragraph 6.a. does not 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 Paragraph 6.b.; and the Operator may proceed to withhold and allocate proceeds for costs from 7/8 of the Pooled Owners' share of production as described in 6.b.(i), (ii), and (iii).

8. In the event a Pooled Owner elects the alternative in Paragraph 6.a. and pays the Operator its share of actual costs and the well is not drilled within 90 days of such payment, the Operator shall refund the payment to the Pooled Owner, unless otherwise agreed to by the Operator and Pooled Owner.

9. For purposes of the Pooled Owners electing alternatives with respect to the nine proposed wells, the amounts of $138,200.00 for estimated drilling costs; $189,000.00 for estimated completion costs; and $158,400.00 for estimated equipping costs are fixed as average well costs for the nine proposed wells. Actual costs shall be used in determining the Pooled Owner's final share of project costs and in determining additional compensation for the risk of the project. If a Pooled Owner has elected the alternative in Paragraph 6.a. and the actual cost exceeds the estimated cost, the Operator may recover the additional cost from 7/8 of the Pooled Owners' share of production. Within 60 days after commencing drilling of the wells, and every 30 days thereafter until all cost of drilling, completing, and equipping the wells and additional compensation 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.

10. All Pooled Owners shall receive the following information from the Operator by no later than the effective date of the Order:

a. The Order;

b. The AFE for the nine proposed wells and the total actual costs to date for drilling, completing, equipping, and operating the three wells already drilled.

c. Each Pooled Owner's total share of costs for drilling, completing, equipping, and operating the three existing and nine proposed wells if the Pooled Owner were to choose option "a" in Paragraph 6 above; and

d. The Pooled Owner's share of actual production to date for the three existing wells.

11. The Supervisor retains jurisdiction in this matter. Any amendments to the USP boundary shall be by Order of the Supervisor after notice to all interested parties.

12. The effective date of this Order is Aug. 9, 2010.

DATED: July 29, 2010

HAROLD R. FITCH
ASSISTANT SUPERVISOR OF WELLS
Office of Geological Survey
P.O. Box 30256
Lansing, MI 48909-7756