STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITION OF SUMMIT PETROLEUM CORPORATION, FOR AN ORDER FROM THE SUPERVISOR OF WELLS FORMING AN 80-ACRE DUNDEE, DETROIT RIVER GROUP, AND SYLVANIA SANDSTONE FORMATION DRILLING UNIT AND STATUTORILY POOLING ALL INTERESTS INTO THE DRILLING UNIT IN RIVERSIDE TOWNSHIP, MISSAUKEE COUNTY, MICHIGAN.	) CAUSE NO. 10-2015

OPINION AND ORDER

This case involves the Petition of Summit Petroleum Corporation (Petitioner), to drill and complete the proposed Hamilton 1-15 well within the stratigraphic interval known as the Dundee Formation, with a secondary target of the Detroit River Group Formations. The Petitioner is requesting an 80-acre drilling unit for the Hamilton 1-15 well as an exception to the 40-acre drilling unit size established by R 324.301. The proposed unit consists of the S 1/2 of SW 1/4 of Section 15, T21N, R7W, Riverside Township, Missaukee County, Michigan. Since not all of the mineral owners within the proposed drilling unit have agreed to voluntarily pool their interests, the Petitioner also seeks an Order of the Supervisor of Wells (Supervisor) designating the Petitioner as Operator of the proposed 80-acre drilling unit and requiring statutory pooling of all tracts and interests within that geographic area where 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, 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 and statutorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the formation of drilling units by statutory 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 December 14, 2015.

FINDINGS OF FACT

The Petitioner specifically requests that the Supervisor issue an Order that:

1. Grants an exception to the drilling unit size established by R 324.301 by establishing an 80-acre drilling unit for the proposed Hamilton 1-15 well consisting of the S 1/2 of SW 1/4 of Section 15, T21N, R7W, Riverside Township, Missaukee County, Michigan.

2. Requires statutory pooling of all tracts and mineral interests within the proposed Dundee and Detroit River Group Formations drilling unit that have not agreed to voluntary pooling.

3. Names the Petitioner as Operator of the Hamilton 1-15 well.

4. Authorizes the Petitioner to recover certain costs and other additional compensation from the parties subject to the statutory pooling order.

The Administrative Law Judge determined that the Notice of Hearing was properly served and published. No answers to the Petition were filed. 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. In support of its case, the Petitioner offered the testimony of Mr. Timothy R. Maness, Principle, Maness Petroleum and petroleum geologist consultant; Mr. Michael Covington, Petroleum Landman, LLC, MLC Land Services; and Mr. Daniel N. Nida, Geologist and Engineer, Summit Petroleum Corporation.

I. Drilling Unit

The spacing of wells in Missaukee County targeting the Dundee and Detroit River Group Formations is governed by R 324.301. This rule establishes drilling units of

40 acres. Under R 324.301, it is presumed that one well will efficiently and economically drain the 40-acre drilling unit of hydrocarbons. The Petitioner's proposed 80-acre drilling unit is described as the S 1/2 of SW 1/4 of Section 15, T21N, R7W, Riverside Township, Missaukee County, Michigan. Petitioner proposes to drill and complete the Hamilton 1-15 well in the Dundee Formation with a secondary target of the Detroit River Group Formations.

Mr. Maness testified 3-D seismic and existing well control information depicts structure at the top of the Dundee Limestone Formation, Petitioner's target formation (Exhibit D). In addition, well control information from a nearby well indicated potential pay in the Detroit River Group Formation, Petitioner's secondary target. Mr. Maness stated the seismic and well control information suggests that the high of the structure is located at the boundary between two 40 acre drilling units, making an 80-acre drilling unit necessary in order to locate the Hamilton 1-15 well at the crest of the structure.

I find that formation of the proposed 80-acre drilling unit, as an exception to R 324.301, will prevent waste and protect correlative rights and, as such, is approved for the proposed Hamilton 1-15 well.

II. Drilling Unit Operator

Mr. Covington's Affidavit of Pooling Efforts states the Petitioner owns oil and gas leases covering approximately 76.08 net mineral acres in the proposed 80-acre drilling unit. Given this, the Petitioner seeks to be designated as the Operator of the Hamilton1-15 well. I find, as a Matter of Fact, the Petitioner is eligible to be designated Operator of the Hamilton 1-15 well.

Due to seasonal pressure considerations in the nearby Riverside Gas Storage Field and other circumstances, Petitioner does not believe it will be able to commence drilling of the Hamilton 1-15 well within 90 days and therefore requests until September 1, 2016 to commence redrilling of the well.

III. Statutory Pooling

The Petitioner was unable to obtain the agreement of all mineral owners to gain full control of the proposed unit. The Petitioner may not produce a well on the drilling unit without first obtaining control of all the oil and gas interests. In cases like this, it is necessary for the Petitioner to request statutory pooling from the Supervisor. As discussed, a mineral owner who does not agree to voluntarily pool his or her interest in a drilling unit may be subject to statutory pooling. 1996 MR 9, R 324.304. The statutory 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 statutory 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 statutory pooling through an Order of the Supervisor.

Mr. Covington's Affidavit of Pooling Efforts states the Petitioner owns approximately 76.08 net mineral acres of oil and gas interests within the proposed 80-acre drilling unit. In addition he testified Petitioner has leased an additional 0.666667 acres owned by Dorchester Minerals, L. P. Exhibit C outlines Mr. Covington's numerous attempts to obtain an oil and gas lease from the unleased owners. The owners of oil and gas interests that are not leased as of the date of the hearing are:

Name	**Net Mineral Acres**
Christina Calvert Lee Trust	0.500000
Robert Hitzelberger Family Trust	0.222221
Donald J. McKinnon & Marilyn G. McKinnon	0.250000
Thomas J. Shapley & Cindy Shapley	0.200000
The Herren Trust	0.250000
Michele Marienne Turner	0.062500
Robert J. Curdy	0.250000
Julia Cobleigh	0.722222
Carol Fetters-Burns	0.240741
Nancy Fetters-McGillan	0.240741
Martin A. Jordan & Violet E. Jordan	0.333333
Total Unleased Net Mineral Acres:	3.271758

All of the above are undivided interests.

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

1. The Petitioner was able to voluntarily pool all of the mineral interests in the proposed 80-acre drilling unit except for the acreage described above.

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

Now that it has been determined statutory pooling is necessary and proper in this case, the terms of such pooling must be addressed. When pooling is ordered, the owner of the statutorily pooled lands (Pooled Owner) is provided an election on how he or she wishes to share in the costs of the project. 1996 MR 9, 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. Whether the well drilled is ultimately a producer or dry hole is immaterial to this obligation. 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. Mr. Nida sponsored Exhibit E, Petitioner's Authorization for Expenditure (AFE) form for the Hamilton 1-15 well, which itemizes the estimated costs to be incurred in the drilling, completing, equipping, and plugging of the well. The estimated costs to be incurred in drilling, completing, and equipping the well to

the Dundee Limestone or Detroit River Group Formations are $311,600.00 for drilling; $96,000.00 for completion; and $36,000.00 for equipping. The total estimated producing well cost for the Hamilton 1-15 well is $443,600.00. There is no evidence on this record refuting these estimated costs.

I find, as a Matter of Fact, the estimated costs in Exhibit E 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 be just and equitable. MCL 324.61513(4). It is Mr. Maness' opinion an 80-acre drilling unit is necessary to provide equitable treatment to all mineral owners within the unit. The Petitioner requests the actual well costs and production from the well be allocated based upon the ratio of the number of surface acres in the tracts of various 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, and as used here, surface acreage refers to net mineral acreage. Therefore, I find, as a Matter of Fact, utilizing surface 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. 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 MR 9, R 324.1206(4)(b). The Petitioner requests additional compensation of 300 percent for the costs of drilling, 200 percent of completing, and 100 percent of equipping the Hamilton 1-15 well.

I find, as a Matter of Fact, the risk of the Hamilton 1-15 well, being a dry hole does support additional compensation from the Pooled Owners of 300 percent of the actual

drilling costs incurred, 200 percent of the actual completing costs and 100 percent of the actual equipping costs. 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. The Petitioner was unable to voluntarily pool all mineral interests within the proposed drilling unit. The Supervisor may statutorily pool properties when pooling cannot be agreed upon. Statutory 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 has not voluntarily agreed to pool all of their interest in the pooled unit may share in the working interest share of production. 1996 MR 9, R 324.1206(4).

3. The Petitioner is an owner within the drilling unit and, therefore, is eligible to drill and operate the Hamilton 1-15 well. 1996 MR 9, R 324.1206(4).

4. The Petitioner is authorized 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 the Supervisor considers appropriate 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 MR 9, R 324.1206(4).

5. Spacing for wells drilled in Missaukee County to the Dundee and Detroit River Group Formations is 40 acres as set by R 324.301. Exceptions to R 324.301 may be granted by the Supervisor after a hearing.

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 MR 9, R 324.1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and Conclusions of Law, the Supervisor determines that statutory pooling to form an 80-acre Dundee and Detroit River Group Formations drilling unit is necessary to protect correlative rights and prevent waste by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. An 80-acre Dundee and Detroit River Group Formations drilling unit is established, as an exception to R 324.301, for the Hamilton 1-15 well comprising the S 1/2 of SW 1/4 of Section 15, T21N, R7W, Riverside Township, Missaukee 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.

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 Hamilton 1-15 well. The Operator shall commence the drilling of the Hamilton 1-15 well on or before September 1, 2016, or the statutory 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 Hamilton 1-15 well only.

4. A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of the 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 post-production costs.

5. A Pooled Owner shall have ten (10) 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 (10) days of making the election (or within a later date as approved by the Supervisor), 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 300 percent of the actual drilling costs, 200 percent of the actual completion costs, and 100 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 (10) days from the effective date of this Order, the Pooled Owner will be deemed to have elected the alternative described in Paragraph 5(b). If a Pooled Owner who elects the alternative in Paragraph 5(a) does not, within ten (10) days of making their election (or within any alternate date approved by the Supervisor), 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 5(b), and the Operator may proceed to withhold and allocate proceeds for costs from the Pooled Owner's 7/8 share of production as described in Paragraph 5(b)(i), (ii) and (iii).

7. For purposes of the Pooled Owners electing alternatives, the amounts of $311,600.00 for estimated drilling costs, $96,000.00 for estimated completion costs, and $36,000.00 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. If a Pooled Owner has elected the alternative in Paragraph 5(a) and the actual cost exceeds the estimated cost, the Operator may recover the additional cost from the Pooled Owner's 7/8 share of production. Within sixty (60) days after commencing drilling of the well, and every thirty

(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.

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. A Pooled Owner shall remain a Pooled Owner only until such time as a lease or operating agreement is entered into with the Operator. At that time, terms of the lease or operating agreement shall prevail over terms of this Order.

10. This Order shall terminate immediately after the Hamilton 1-15 well has been plugged and abandoned.

11. The Supervisor retains jurisdiction in this matter.

12. The effective date of this Order is March 3, 2016.

DATED: Feb. 22, 2016

HAROLD R. FITCH
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