

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 24892
(CONTINUED)
ORDER NO. 27283

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER TO CONSIDER THE APPROPRIATE SPACING FOR THE BAKKEN HUNTER, LLC #3427-2MBH PACER WELL (FILE NO. 23355), LOT 4, SECTION 3, T.163N., R.99W., DIVIDE COUNTY, ND, AMBROSE-BAKKEN POOL, CURRENTLY COMPLETED IN A STANDUP 2080-ACRE SPACING UNIT DESCRIBED AS SECTIONS 27 AND 34, T.164N., R.99W. AND SECTIONS 3 AND 10, T.163N., R.99W., DIVIDE COUNTY, ND; TO CONSIDER THE ALTERING OF SPACING UNITS IN THE AMBROSE-BAKKEN POOL IN SECTIONS 27 AND 34, T.164N., R.99W. AND SECTIONS 3 AND 10, T.163N., R.99W., DIVIDE COUNTY, ND; AND TO CHANGE THE TIMING RESTRICTIONS FOR HORIZONTAL WELLS TO BE COMPLETED IN STANDUP 2080-ACRE SPACING UNITS DESCRIBED AS SECTIONS 26 AND 35, T.164N., R.99W. AND SECTIONS 2 AND 11, T.163N., R.99W.; SECTIONS 27 AND 34, T.164N., R.99W. AND SECTIONS 3 AND 10, T.163N., R.99W.; AND SECTIONS 28 AND 33, T.164N., R.99W. AND SECTIONS 4 AND 9, T.163N., R.99W., DIVIDE COUNTY, ND; AND SUCH OTHER RELIEF AS IS APPROPRIATE.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause originally came on for hearing at 9:00 a.m. on the 23rd day of March, 2016. At that time, counsel for Bakken Hunter, LLC (Bakken Hunter) and Samson Resources Company (Samson) requested this case be continued to the regularly scheduled hearing in April 2016. There were no objections, the hearing officer granted the request, and this case was scheduled for hearing on April 27, 2016. At that time, counsel for Bakken Hunter requested this case be continued to the regularly scheduled hearing in May 2016. There were no objections, the hearing officer granted the request, and this case was scheduled for hearing on May 19, 2016.

(2) On May 19, 2016, counsel for Bakken Hunter and Hunt Oil Company (Hunt) entered appearances and ultimately requested the case be continued to the regularly scheduled hearing in June 2016. There were no objections, the hearing officer granted the request, and this case was scheduled for hearing on June 22, 2016.

(3) The regional land manager for Hunt provided telephonic testimony in this matter on June 22, 2016 pursuant to North Dakota Administrative Code (NDAC) Section 43-02-03-88.2. A Telephonic Communication Affidavit was received on July 20, 2016; therefore, such testimony may be considered evidence.

(4) This matter was called on a motion of the Commission to consider the appropriate spacing for the Bakken Hunter #3427-2MBH Pacer well (File No. 23355), located in Lot 4, Section 3, Township 163 North, Range 99 West, Divide County, North Dakota (Section 3), Ambrose-Bakken Pool, currently completed in a standup 2080-acre spacing unit described as Sections 27 and 34, Township 164 North, Range 99 West (Sections 27 and 34) and Sections 3 and 10, Township 163 North, Range 99 West (Section 10), Divide County, North Dakota; to consider the altering of spacing units in the Ambrose-Bakken Pool in said Sections 27 and 34 and said Sections 3 and 10; and to change the timing restrictions for horizontal wells to be completed in standup 2080-acre spacing units described as Sections 26 and 35, Township 164 North, Range 99 West (Sections 26 and 35) and Sections 2 and 11, Township 163 North, Range 99 West (Sections 2 and 11); said Sections 27, 34, 3, and 10; and Sections 28 and 33, Township 164 North, Range 99 West (Sections 28 and 33) and Sections 4 and 9, Township 163 North, Range 99 West (Sections 4 and 9), Divide County, North Dakota; and such other relief as is appropriate.

(5) Order No. 24685 entered in Case No. 22350, the most recent spacing order for the Ambrose-Bakken Pool, established proper spacing for the development of Zone I at one horizontal well per 640 acres, Zone II at up to three horizontal wells per 640 acres, Zone III at one horizontal well per 800 acres, Zone IV at up to seven horizontal wells per 800 acres, Zones V and VI at one horizontal well per 1280 acres, Zone VII at up to seven horizontal wells per 1280 acres, Zone VIII at a minimum of four horizontal wells, up to twelve horizontal wells, per 2080 acres, Zone IX at one horizontal well per 2560 acres, Zone X at up to thirteen horizontal wells per 2560 acres, Zone XI at two horizontal wells per 4160 acres, and Zone XII at two horizontal wells per 5120 acres.

(6) Section 27 is a short section adjacent to the North Dakota-Canada border containing approximately 154.4 acres.

(7) Sections 27, 34, 3, and 10 are currently a standup 2080-acre spacing unit in Zone VIII in the Ambrose-Bakken Pool.

(8) Sections 27 and 34 are also currently a standup 800-acre spacing unit in Zone III in the Ambrose-Bakken Pool. There are no wells currently permitted to or producing from said spacing unit.

(9) Sections 3 and 10 are also currently a standup 1280-acre spacing unit in Zone V in the Ambrose-Bakken Pool. The Samson #0310-04TFH Biscayne well (File No. 21363) is a

horizontal well completed in the upper Three Forks Formation in said spacing unit from a surface location 450 feet from the north line and 2100 feet from the east line of Section 3 to a bottom hole location in the SW/4 SE/4 of Section 10.

(10) The Pacer #3427-2MBH well, located 230 feet from the north line and 1100 feet from the west line of Section 3, was permitted as a horizontal well in the standup 2080-acre spacing unit described as Sections 27, 34, 3, and 10, pursuant to Order No. 22966.

(11) Bakken Hunter drilled the Pacer #3427-2MBH well in the middle member of the Bakken Formation within the Ambrose-Bakken Pool to 13,430 feet measured depth (MD), approximately 902 feet from the north line and 1246 feet from the west line of Section 27. The production casing was set at 8134 feet MD, approximately 365 feet from the south line and 1374 feet from the west line of Section 34.

(12) The Pacer #3427-2MBH well was completed on January 30, 2014 in the Ambrose-Bakken Pool and has produced 40,737 barrels of oil through May 2016.

(13) The Pacer #3427-2MBH well is the only horizontal well completed in the standup 2080-acre spacing unit described as Sections 27, 34, 3, and 10.

(14) Requirements in the Ambrose-Bakken Pool require that a minimum of four horizontal wells be drilled and completed in the standup 2080-acre spacing unit described as Sections 27, 34, 3, and 10. In addition and more precisely, a mirror offset horizontal well to the Biscayne #0310-04TFH well shall be drilled and completed in the standup 800-acre spacing unit described as Sections 27 and 34, within twelve months of completing the first horizontal well in the standup 2080-acre spacing unit, and a minimum of four horizontal wells shall be drilled and completed within the standup 2080-acre spacing unit within twenty-four months from when the first horizontal well is completed in the standup 2080-acre spacing unit. If these conditions are not met, the Commission shall schedule the matter for consideration to reduce the size of the spacing unit.

(15) A mirror offset horizontal well to the Biscayne #0310-04TFH well was not drilled and completed in the standup 800-acre spacing unit described as Sections 27 and 34 within twelve months of completing the Pacer #3427-2MBH well; said deadline occurred on January 30, 2015.

(16) Four horizontal wells were not drilled and completed within the standup 2080-acre spacing unit described as Sections 27, 34, 3, and 10 within twenty-four months from when the Pacer #3427-2MBH well was completed in the standup 2080-acre spacing unit; said deadline occurred on January 30, 2016.

(17) The Pacer #3427-2MBH well does not justify the standup 2080-acre spacing unit described as Sections 27, 34, 3, and 10.

(18) The appropriate spacing unit for the Pacer #3427-2MBH well is a standup 800-acre spacing unit described as Sections 27 and 34.

(19) Bakken Hunter has filed bankruptcy and has no employees. Bakken Hunter has no plans for further development of the standup 2080-acre spacing unit described as Sections 27, 34,

3, and 10. Bakken Hunter is not requesting Sections 27 and 34 be established as a standup 800-acre spacing unit for the Pacer #3427-2MBH well but does not object, although Bakken Hunter requests it be prospective if the Commission determines said spacing unit is appropriate.

(20) Bakken Hunter acknowledged there are some joint operating agreements and other contracts between it and other working interest owners. Bakken Hunter intends to honor these agreements and contracts, as well as elections to participate in the Pacer #3427-2MBH well; these owners would participate in the well even if the spacing unit were changed. A prospective change in the spacing unit would only affect the royalty interests.

(21) Hunt has a 40-acre unleased mineral interest in the N/2 of Section 10. Hunt elected to participate in the Pacer #3427-2MBH well and has been paying the bills received. Hunt testified the well has not paid out. Hunt has not signed a joint operating agreement and is concerned it may not recover its investment if the spacing unit is changed to an 800-acre spacing unit. Hunt stated that if an 800-acre spacing unit is established for the Pacer #3427-2MBH well, it would no longer have an interest in the spacing unit and may not recover any additional revenue even though it participated in the drilling, completion, and operation of the well. Hunt acknowledged it is possible to sign a joint operating agreement now, but given the circumstances surrounding Bakken Hunter, does not believe this is likely.

(22) Hunt requests that it and any other owners that participated in the Pacer #3427-2MBH well on a 2080-acre spacing unit basis be allowed to continue to participate on that basis if an 800-acre spacing unit is established for the well.

(23) Hunt argues its election to participate in the Pacer #3427-2MBH well constitutes a contract similar to a joint operating agreement although not as detailed, and Bakken Hunter is obligated to pay Hunt on a 2080-acre spacing unit basis even if an 800-acre spacing unit is established for the well since Hunt elected to participate and has been paying its bills.

(24) Hunt stated that if an election to participate is deemed a contract, Hunt would continue to have an interest in the Pacer #3427-2MBH well even if Sections 27 and 34 are established as an 800-acre spacing unit for the well, and would have no objection to the establishment of said spacing unit.

(25) The Commission notes it has no jurisdiction over private contracts. Private contracts cannot deprive the Commission of its obligations to apply the broad public purposes that define its mission, such as establishing and defining pools, establishing or modifying spacing units, preventing waste, avoiding the drilling of unnecessary wells, and protecting correlative rights.

(26) Sections 27 and 34 should be established as a standup 800-acre spacing unit for the Pacer #3427-2MBH well on a prospective basis to prevent waste, avoid the drilling of unnecessary wells, and protect correlative rights.

(27) The standup 2080-acre spacing unit in the Ambrose-Bakken Pool described as Sections 27, 34, 3, and 10 should be terminated.

(28) Section 26 is a short section adjacent to the North Dakota-Canada border containing approximately 155.6 acres.

(29) Sections 26, 35, 2, and 11 are currently a standup 2080-acre spacing unit in Zone VIII in the Ambrose-Bakken Pool. There are no wells currently permitted to or producing from said spacing unit.

(30) Sections 26 and 35 are also currently a standup 800-acre spacing unit in Zone III in the Ambrose-Bakken Pool. There are no wells currently permitted to or producing from said spacing unit.

(31) Sections 2 and 11 are also currently a standup 1280-acre spacing unit in Zone V in the Ambrose-Bakken Pool. The Samson #11-2-163-99H Le Mans well (File No. 20341) is a horizontal well completed in the upper Three Forks Formation in said spacing unit from a surface location 455 feet from the north line and 2465 feet from the east line of Section 14, Township 163 North, Range 99 West, Divide County, North Dakota, to a bottom hole location in the NW/4 NE/4 of Section 2.

(32) Section 28 is a short section adjacent to the North Dakota-Canada border containing approximately 153.36 acres.

(33) Sections 28, 33, 4, and 9 are currently a standup 2080-acre spacing unit in Zone VIII in the Ambrose-Bakken Pool. There are no wells currently permitted to or producing from said spacing unit.

(34) Sections 28 and 33 are also currently a standup 800-acre spacing unit in Zone III in the Ambrose-Bakken Pool. There are no wells currently permitted to or producing from said spacing unit.

(35) Sections 4 and 9 are also currently a standup 1280-acre spacing unit in Zone V in the Ambrose-Bakken Pool. The Samson #4-9-163-99H Skyline well (File No. 20646) is a horizontal well completed in the upper Three Forks Formation in said spacing unit from a surface location 259 feet from the north line and 2454 feet from the east line of Section 4 to a bottom hole location in the SW/4 SE/4 of Section 9.

(36) Requirements in the Ambrose-Bakken Pool require that a mirror offset horizontal well to the Le Mans #11-2-163-99H well shall be drilled and completed in the standup 800-acre spacing unit described as Sections 26 and 35; and a mirror offset horizontal well to the Skyline #4-9-163-99H well shall be drilled and completed in the standup 800-acre spacing unit described as Sections 28 and 33 within twelve months of completing the first horizontal well in each respective standup 2080-acre spacing unit, and a minimum of four horizontal wells shall be drilled and completed within each standup 2080-acre spacing unit within twenty-four months from when the first horizontal well is completed in the respective standup 2080-acre spacing unit. If these conditions are not met, the Commission shall schedule the matter for consideration to reduce the size of the spacing unit.

(37) In order to protect correlative rights, the Commission should require the mirror offset horizontal well to the Le Mans #11-2-163-99H well to be drilled and completed in the standup 800-acre spacing unit described as Sections 26 and 35 prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 26, 35, 2, and 11. In addition, a

minimum of four horizontal wells should be drilled consecutively to justify the standup 2080-acre spacing unit described as Sections 26, 35, 2, and 11.

In order to protect correlative rights, the Commission should require the mirror offset horizontal well to the Skyline #4-9-163-99H well be drilled and completed in the standup 800-acre spacing unit described as Sections 28 and 33 prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 28, 33, 4, and 9. In addition, a minimum of four horizontal wells should be drilled consecutively to justify the standup 2080-acre spacing unit described as Sections 28, 33, 4, and 9.

(38) Cameron Moen (Moen) submitted a letter received March 22, 2016 stating opposition to any changes requested by the operator that would vary from stipulations set forth in Order No. 22966 entered in Case No. 20661, affecting sections within the request. In Case No. 20661, Moen stated that Sections 26 and 35 are the only two sections in the proposed 4160-acre spacing unit described as Sections 26, 35, 2, and 11, Sections 25 and 36, Township 164 North, Range 99 West, and Sections 1 and 12, Township 163 North, Range 99 West, Divide County, North Dakota, that currently have no production. Furthermore, the objection will be withdrawn if it is ordered that Samson drill and complete a well in the current standup 800-acre spacing unit described as Sections 26 and 35 prior to the drilling of a well in said proposed 4160-acre spacing unit. Order No. 22966 contained such a provision.

IT IS THEREFORE ORDERED:

(1) Sections 27 and 34, Township 164 North, Range 99 West, Divide County, North Dakota, are hereby established as a standup 800-acre spacing unit in Zone III in the Ambrose-Bakken Pool for the Pacer #3427-2MBH well (File No. 23355) well, located in Lot 4 of Section 3, Township 163 North, Range 99 West, Divide County, North Dakota, effective August 1, 2016.

(2) The standup 2080-acre spacing unit in the Ambrose-Bakken Pool described as Sections 27 and 34, Township 164 North, Range 99 West and Sections 3 and 10, Township 163 North, Range 99 West, Divide County, North Dakota, is hereby terminated.

(3) The mirror offset horizontal well to the Le Mans #11-2-163-99H well (File No. 20341) shall be drilled and completed in the standup 800-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West, Divide County, North Dakota, prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West and Sections 2 and 11, Township 163 North, Range 99 West, Divide County, North Dakota.

The mirror offset horizontal well to the Skyline #4-9-163-99H well (File No. 20646) shall be drilled and completed in the standup 800-acre spacing unit described as Sections 28 and 33, Township 164 North, Range 99 West, Divide County, North Dakota, prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 28 and 33, Township 164 North, Range 99 West and Sections 4 and 9, Township 163 North, Range 99 West, Divide County, North Dakota.

(4) A minimum of four horizontal wells shall be drilled and completed consecutively in each standup 2080-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West and Sections 2 and 11, Township 163 North, Range 99 West; and Sections 28 and 33, Township 164 North, Range 99 West and Sections 4 and 9, Township 163 North, Range 99 West, Divide County, North Dakota.

(5) The Director is hereby authorized to exercise continuing jurisdiction in this matter to determine whether a horizontal well proposed or drilled upon the 800-acre spacing unit herein established has justified the creation of such unit, to require amendments or modifications to the permit to drill for such horizontal well, and to deny a permit to drill in the event a well is proposed to be drilled in a manner inconsistent with the evidence that justified such spacing unit.

(6) Provisions established herein for the Ambrose-Bakken Pool are for the exclusive purpose of drilling horizontal wells. Existing and future vertical and directional wells drilled within the area defined in paragraph (7) below shall not be subject to this order.

(7) The Ambrose Field is hereby defined as the following described tracts of land in Divide County, North Dakota:

TOWNSHIP 164 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 25, 26, 27, 28, 29, 32, 33, 34, 35 AND 36,

TOWNSHIP 164 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 30 AND 31,

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 AND 36,

TOWNSHIP 163 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 6, 7, 18, 19, 30 AND 31,

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1 THROUGH 36, INCLUSIVE,

TOWNSHIP 162 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 6, 7, 18, 19, 30 AND 31.

(8) The Ambrose-Bakken Pool is hereby redefined as the following described tracts of land in Divide County, North Dakota:

ZONE I (640H)

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 26, 27, 34 AND 35,

TOWNSHIP 163 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 30 AND 31,

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 2, 3, 10, 11, 13, 14, 15, 22, 23, 24 AND 36.

ZONE II (3/640H)

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 4, 5, 8 AND 9.

ZONE III (800H-STANDUP)

TOWNSHIP 164 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 25, 26, 27, 28, 29, 32, 33, 34, 35 AND 36.

ZONE IV (7/800H-STANDUP)

TOWNSHIP 164 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 30 AND 31.

ZONE V (1280H-STANDUP)

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 23, 24, 25 AND 36.

ZONE VI (1280H-LAYDOWN-OVERLAPPING 640S)

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 4 AND 5.

ZONE VII (7/1280H-STANDUP)

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 15, 16, 17, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33 AND 34,

TOWNSHIP 163 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 6, 7, 18, 19, 30 AND 31,

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1, 6, 7, 12, 16, 17, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35
AND 36,

TOWNSHIP 162 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 6, 7, 18, 19, 30 AND 31.

ZONE VIII (4-12/2080H-STANDUP)

TOWNSHIP 164 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 25, 26, 28, 29, 32, 33, 35 AND 36,

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1, 2, 4, 5, 8, 9, 11 AND 12.

ZONE IX (2560H-NORTH/SOUTH ORIENTATION-LEASE-LINE)

TOWNSHIP 163 NORTH, RANGE 100 WEST, 5TH PM
ALL OF SECTIONS 25* AND 36*,

*Sections 25 and 36 are within the West Ambrose Field.

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 14, 15, 16, 17, 18*, 19*, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34
AND 35,

*Sections 18 and 19 are within the West Ambrose Field.

TOWNSHIP 163 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 17*, 18, 19 AND 20*,

*Sections 17 and 20 are within the Blooming Prairie Field.

TOWNSHIP 162 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1 AND 12,

TOWNSHIP 162 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 5*, 6, 7, 8*, 17*, 18, 19 AND 20*.

*Sections 5, 8, 17, and 20 are within the Blooming Prairie Field.

ZONE X (13/2560H-STANDUP)

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 13, 14, 23, 24, 25, 26, 35 AND 36.

ZONE XI (2/4160H-STANDUP-NORTH/SOUTH ORIENTATION-LEASE-LINE)

TOWNSHIP 164 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 25, 26, 29, 30*, 31*, 32, 35 AND 36,

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 1, 2, 5, 6*, 7*, 8, 11 AND 12.

*Sections 30, 31, 6, and 7 are within the West Ambrose Field.

ZONE XII (2/5120H-STANDUP-NORTH/SOUTH ORIENTATION-LEASE-LINE)

TOWNSHIP 163 NORTH, RANGE 99 WEST, 5TH PM
ALL OF SECTIONS 13, 14, 23, 24, 25, 26, 35 AND 36,

TOWNSHIP 163 NORTH, RANGE 98 WEST, 5TH PM
ALL OF SECTIONS 18, 19, 30 AND 31.

(9) The Ambrose-Bakken Pool is hereby defined as that accumulation of oil and gas found in the interval from 50 feet above the top of the Bakken Formation to 100 feet below the top of the Three Forks Formation within the limits of the field as set forth above, with an exception as noted in Zone IX below.

(10) The proper spacing for the development of Zone I in the Ambrose-Bakken Pool is hereby set at one horizontal well per 640-acre spacing unit.

(11) All portions of the well bore not isolated by cement of any horizontal well in Zone I in the Ambrose-Bakken Pool shall be no closer than 500 feet to the boundary of the spacing unit the lateral is most nearly parallel to and 200 feet to the boundary of the spacing unit the lateral is most nearly perpendicular to. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(12) Spacing units hereafter created in Zone I in the Ambrose-Bakken Pool shall consist of a governmental section.

(13) Zone I in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(14) The proper spacing for the development of Zone II in the Ambrose-Bakken Pool is hereby set at up to three horizontal wells per 640-acre spacing unit.

(15) All portions of the well bore not isolated by cement of any horizontal well in Zone II in the Ambrose-Bakken Pool shall be no closer than 500 feet to the boundary of the spacing unit the lateral is most nearly parallel to and 200 feet to the boundary of the spacing unit the lateral is most nearly perpendicular to. Measurement inaccuracies in the directional survey equipment when calculating the bottom hole location in a horizontal well need not be considered.

(16) Spacing units hereafter created in Zone II in the Ambrose-Bakken Pool shall consist of a governmental section.

(17) Zone II in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(18) The proper spacing for the development of Zone III in the Ambrose-Bakken Pool is hereby set at one horizontal well per standup 800-acre spacing unit.

(19) All portions of the well bore not isolated by cement of any horizontal well in Zone III in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(20) Sections 25 and 36; Sections 26 and 35; Sections 27 and 34; Sections 28 and 33; and Sections 29 and 32, Township 164 North, Range 99 West, Divide County, North Dakota, are hereby designated standup 800-acre spacing units in Zone III in the Ambrose-Bakken Pool.

(21) Spacing units hereafter created in Zone III in the Ambrose-Bakken Pool shall be standup spacing units designated by the Commission.

(22) Zone III in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(23) The proper spacing for the development of Zone IV in the Ambrose-Bakken Pool is hereby set at up to seven horizontal wells per standup 800-acre spacing unit.

(24) All portions of the well bore not isolated by cement of any horizontal well in Zone IV in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment when calculating the bottom hole location in a horizontal well need not be considered.

(25) Sections 30 and 31, Township 164 North, Range 98 West, Divide County, North Dakota, are hereby designated a standup 800-acre spacing unit in Zone IV in the Ambrose-Bakken Pool.

(26) Spacing units hereafter created in Zone IV in the Ambrose-Bakken Pool shall be standup spacing units designated by the Commission.

(27) Zone IV in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(28) The proper spacing for the development of Zone V in the Ambrose-Bakken Pool is hereby set at one horizontal well per standup 1280-acre spacing unit.

(29) All portions of the well bore not isolated by cement of any horizontal well in Zone V in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(30) Sections 1 and 12; Sections 2 and 11; Sections 3 and 10; Sections 4 and 9; Sections 5 and 8; Sections 13 and 24; Sections 14 and 23; and Sections 25 and 36, Township 163 North, Range 99 West, Divide County, North Dakota, are hereby designated standup 1280-acre spacing units in Zone V in the Ambrose-Bakken Pool.

(31) Spacing units hereafter created in Zone V in the Ambrose-Bakken Pool shall be standup spacing units consisting of two adjacent governmental sections.

(32) Zone V in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(33) The proper spacing for the development of Zone VI in the Ambrose-Bakken Pool is hereby set at one horizontal well per laydown 1280-acre spacing unit.

(34) All portions of the well bore not isolated by cement of any horizontal well in Zone VI in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet

to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(35) Sections 4 and 5, Township 162 North, Range 99 West, Divide County, North Dakota, are hereby designated a laydown 1280-acre spacing unit in Zone VI in the Ambrose-Bakken Pool.

(36) Spacing units hereafter created in Zone VI in the Ambrose-Bakken Pool shall be laydown spacing units consisting of two adjacent governmental sections which overlap 640-acre spacing units.

(37) Zone VI in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(38) The proper spacing for the development of Zone VII in the Ambrose-Bakken Pool is hereby set at up to seven horizontal wells per standup 1280-acre spacing unit.

(39) All portions of the well bore not isolated by cement of any horizontal well in Zone VII in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment when calculating the bottom hole location in a horizontal well need not be considered.

(40) Sections 15 and 22; Sections 16 and 21; Sections 17 and 20; Sections 27 and 34; Sections 28 and 33; Sections 29 and 32; Sections 30 and 31, Township 163 North, Range 99 West; Sections 6 and 7; Sections 18 and 19; Sections 30 and 31, Township 163 North, Range 98 West; Sections 1 and 12; Sections 6 and 7; Sections 16 and 21; Sections 17 and 20; Sections 18 and 19; Sections 25 and 36; Sections 26 and 35; Sections 27 and 34; Sections 28 and 33; Sections 29 and 32; Sections 30 and 31, Township 162 North, Range 99 West; Sections 6 and 7; Sections 18 and 19; and Sections 30 and 31, Township 162 North, Range 98 West, Divide County, North Dakota, are hereby designated standup 1280-acre spacing units in Zone VII in the Ambrose-Bakken Pool.

(41) Spacing units hereafter created in Zone VII in the Ambrose-Bakken Pool shall be standup spacing units consisting of two adjacent governmental sections.

(42) Zone VII in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(43) The proper spacing for the development of Zone VIII in the Ambrose-Bakken Pool is hereby set at a minimum of four horizontal wells, up to twelve horizontal wells, per standup 2080-acre spacing unit.

(44) All portions of the well bore not isolated by cement of any horizontal well in Zone VIII in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment when calculating the bottom hole location in a horizontal well need not be considered.

(45) Sections 25 and 36, Township 164 North, Range 99 West and Sections 1 and 12, Township 163 North, Range 99 West; Sections 26 and 35, Township 164 North, Range 99 West and Sections 2 and 11, Township 163 North, Range 99 West; Sections 28 and 33, Township 164 North, Range 99 West and Sections 4 and 9, Township 163 North, Range 99 West; and Sections 29 and 32, Township 164 North, Range 99 West and Sections 5 and 8, Township 163 North, Range 99 West, Divide County, North Dakota, are hereby designated standup 2080-acre spacing units in Zone VIII in the Ambrose-Bakken Pool.

(46) The mirror offset horizontal well to the Le Mans #11-2-163-99H well (File No. 20341) shall be drilled and completed in the standup 800-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West, Divide County, North Dakota, prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West and Sections 2 and 11, Township 163 North, Range 99 West, Divide County, North Dakota.

The mirror offset horizontal well to the Skyline #4-9-163-99H well (File No. 20646) shall be drilled and completed in the standup 800-acre spacing unit described as Sections 28 and 33, Township 164 North, Range 99 West, Divide County, North Dakota, prior to completing any horizontal well in the standup 2080-acre spacing unit described as Sections 28 and 33, Township 164 North, Range 99 West and Sections 4 and 9, Township 163 North, Range 99 West, Divide County, North Dakota.

(47) A minimum of four horizontal wells shall be drilled and completed consecutively within each standup 2080-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West and Sections 2 and 11, Township 163 North, Range 99 West; and Sections 28 and 33, Township 164 North, Range 99 West and Sections 4 and 9, Township 163 North, Range 99 West, Divide County, North Dakota.

(48) Spacing units hereafter created in Zone VIII in the Ambrose-Bakken Pool shall be standup spacing units designated by the Commission.

(49) Zone VIII in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(50) The proper spacing for the development of Zone IX in the Ambrose-Bakken Pool is hereby set at one lease-line horizontal well per 2560-acre spacing unit drilled on a north-south orientation.

(51) The Ambrose-Bakken Pool in Zone IX is hereby defined as that accumulation of oil and gas found in the interval from the base of the Bakken Formation to 100 feet below the top of the Three Forks Formation in those 2560-acre spacing units described in paragraph (52) below. The Ambrose-Bakken Pool in the spacing units described in paragraph (53) below is as described in paragraph (8) above.

(52) All portions of the well bore not isolated by cement of any horizontal well in Zone IX in the Ambrose-Bakken Pool shall be located approximately down the north-south axis and no closer than 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(53) Sections 16, 17, 20, and 21; Sections 28, 29, 32, and 33; Sections 29, 30, 31, and 32, Township 163 North, Range 99 West; and Sections 25* and 36*, Township 163 North, Range 100 West and Sections 30 and 31, Township 163 North, Range 99 West, Divide County, North Dakota, are hereby designated 2560-acre spacing units in Zone IX in the Ambrose-Bakken Pool.

*Sections 25 and 36 are within the West Ambrose Field.

(54) Sections 14, 15, 22, and 23; Sections 15, 16, 21, and 22; Sections 17, 18*, 19*, and 20; Sections 26, 27, 34, and 35, Township 163 North, Range 99 West; Sections 17**, 18, 19, and 20**, Township 163 North, Range 98 West; Sections 1 and 12, Township 162 North, Range 99 West and Sections 6 and 7, Township 162 North, Range 98 West; Sections 5***, 6, 7, and 8***; and Sections 17***, 18, 19, and 20***, Township 162 North, Range 98 West, Divide County, North Dakota, are hereby designated 2560-acre spacing units in Zone IX in the Ambrose-Bakken Pool.

*Sections 18 and 19 are within the West Ambrose Field.

**Sections 17 and 20 are within the Blooming Prairie Field.

***Sections 5, 8, 17, and 20 are within the Blooming Prairie Field.

(55) Spacing units hereafter created in Zone IX in the Ambrose-Bakken Pool shall consist of four adjacent governmental sections designated by the Commission.

(56) Zone IX in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(57) The proper spacing for the development of Zone X in the Ambrose-Bakken Pool is hereby set at up to thirteen horizontal wells per standup 2560-acre spacing unit.

(58) All portions of the well bore not isolated by cement of any horizontal well in Zone X in the Ambrose-Bakken Pool shall be no closer than 500 feet to the east or west boundary and 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment when calculating the bottom hole location in a horizontal well need not be considered.

(59) Sections 13, 24, 25, and 36; and Sections 14, 23, 26, and 35, Township 163 North, Range 99 West, Divide County, North Dakota, are hereby designated standup 2560-acre spacing units in Zone X in the Ambrose-Bakken Pool.

(60) Spacing units hereafter created in Zone X in the Ambrose-Bakken Pool shall be standup spacing units consisting of four adjacent governmental sections.

(61) Zone X in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(62) The proper spacing for the development of Zone XI in the Ambrose-Bakken Pool is hereby set at two lease-line horizontal wells per standup 4160-acre spacing unit.

(63) All portions of the well bore not isolated by cement of any horizontal well in Zone XI in the Ambrose-Bakken Pool shall be located approximately down the north-south axis and no closer than 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(64) Sections 25, 26, 35, and 36, Township 164 North, Range 99 West and Sections 1, 2, 11, and 12, Township 163 North, Range 99 West; and Sections 29, 30*, 31*, and 32, Township 164 North, Range 99 West and Sections 5, 6*, 7*, and 8, Township 163 North, Range 99 West, Divide County, North Dakota, are hereby designated standup 4160-acre spacing units in Zone XI in the Ambrose-Bakken Pool.

*Sections 30, 31, 6, and 7 are within the West Ambrose Field.

(65) A horizontal well shall be completed in the standup 800-acre spacing unit described as Sections 26 and 35, Township 164 North, Range 99 West, Divide County, North Dakota, prior to completing any horizontal well in the standup 4160-acre spacing unit described as Sections 25, 26, 35, and 36, Township 164 North, Range 99 West and Sections 1, 2, 11, and 12, Township 163 North, Range 99 West, Divide County, North Dakota.

(66) In order to protect correlative rights and to justify the standup 4160-acre spacing units described as Sections 25, 26, 35, and 36, Township 164 North, Range 99 West and Sections 1, 2, 11, and 12, Township 163 North, Range 99 West; and Sections 29, 30*, 31*, and 32, Township 164 North, Range 99 West and Sections 5, 6*, 7*, and 8, Township 163 North, Range 99 West, Divide County, North Dakota, the two horizontal wells shall be drilled consecutively and target the same zone.

*Sections 30, 31, 6, and 7 are within the West Ambrose Field.

(67) Spacing units hereafter created in Zone XI in the Ambrose-Bakken Pool shall be designated by the Commission.

(68) Zone XI in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(69) The proper spacing for the development of Zone XII in the Ambrose-Bakken Pool is hereby set at two lease-line horizontal wells per standup 5120-acre spacing unit.

(70) All portions of the well bore not isolated by cement of any horizontal well in Zone XII in the Ambrose-Bakken Pool shall be located approximately down the north-south axis and no closer than 200 feet to the north or south boundary of the spacing unit. Measurement inaccuracies in the directional survey equipment need not be considered except when deemed necessary by the Director.

(71) Sections 13, 14, 23, 24, 25, 26, 35, and 36, Township 163 North, Range 99 West; and Sections 13, 24, 25, and 36, Township 163 North, Range 99 West and Sections 18, 19, 30, and 31, Township 163 North, Range 98 West, Divide County, North Dakota, are hereby designated standup 5120-acre spacing units in Zone XII in the Ambrose-Bakken Pool.

(72) In order to protect correlative rights and to justify the standup 5120-acre spacing units described as Sections 13, 14, 23, 24, 25, 26, 35, and 36, Township 163 North, Range 99 West; and Sections 13, 24, 25, and 36, Township 163 North, Range 99 West and Sections 18, 19, 30, and 31, Township 163 North, Range 98 West, Divide County, North Dakota, the two horizontal wells shall be drilled consecutively and target the same zone.

(73) Spacing units hereafter created in Zone XII in the Ambrose-Bakken Pool shall consist of eight adjacent governmental sections designated by the Commission.

(74) Zone XII in the Ambrose-Bakken Pool shall not be extended except by further order of the Commission after due notice and hearing.

(75) The operator of any horizontally drilled well in the Ambrose-Bakken Pool shall cause to be made a directional survey of the well bore. The directional survey contractor shall file a certified survey with the Commission within 30 days after completion of the well in accordance with NDAC Section 43-02-03-25. The survey shall be of sufficient quality to enable the Commission to determine the entire completion location of the well and its terminus.

(76) The Director is hereby authorized to exercise continuing jurisdiction to determine whether any well proposed or drilled upon any spacing unit herein established has justified the creation of such unit, to require amendments or modifications to the permit to drill for such well, and to deny a permit to drill in the event a well is proposed to be drilled in a manner inconsistent with the evidence that justified the spacing requirements in the Ambrose-Bakken Pool.

(77) The Commission shall have continuing jurisdiction in this matter and specifically reserves the authority, upon its own motion or the motion of any interested party, to: (1) review the spacing requirements for the Ambrose-Bakken Pool; (2) determine whether the separate zones of spacing established herein are warranted; and (3) make such further amendments or modifications to the spacing requirements for the Ambrose-Bakken Pool as the Commission deems appropriate.

(78) No well shall be drilled or produced in the Ambrose-Bakken Pool, as defined herein, except in conformity with the regulations above without special order of the Commission after due notice and hearing.

(79) The following rules concerning the casing, tubing and equipping of wells shall apply to the subsequent drilling and operation of wells in the Ambrose-Bakken Pool:

- (a) The surface casing shall consist of new or reconditioned pipe that has been previously tested to 1000 pounds per square inch. The casing shall be set and cemented at a point not less than 50 feet below the base of the Fox Hills Formation. Sufficient cement shall be used to fill the annular space outside the pipe to the surface of the ground, or the bottom of the cellar, and sufficient scratchers and centralizers shall be used to assure a good cement job. Cement shall be allowed to stand a minimum of 12 hours before drilling the plug or initiating tests. The quality of cement shall conform to the standards provided under NDAC Section 43-02-03-21. After cementing, the casing shall be tested by application of pump pressure of at least 1000 pounds per square inch. If, at the

end of 30 minutes this pressure has dropped 100 pounds per square inch or more, the casing shall be repaired. Thereafter, the casing shall again be tested in the same manner. Further work shall not proceed until a satisfactory test has been obtained;

- (b) The producing or oil string shall consist of new or reconditioned pipe that has been previously tested to 2000 pounds per square inch. Casing shall be set and cemented at a point not higher than the top of the producing formation, or at a point approved by the Director. Sufficient cement shall be used and applied in such a manner as to protect and isolate all formations containing oil and/or gas, protect the pipe through salt sections encountered, and isolate the Dakota-Lakota Series. The cement shall be allowed to stand a minimum of 15 hours before drilling the plug or initiating tests. The quality of cement shall conform to the standards provided under NDAC Section 43-02-03-21. After cementing, the casing shall be tested by application of pump pressure of at least 1500 pounds per square inch. If, at the end of 30 minutes this pressure has dropped 150 pounds per square inch or more, the casing shall be repaired. Thereafter, the casing shall again be tested in the same manner. Further work shall not proceed until a satisfactory test has been obtained;
- (c) All well-head fittings and connections shall have a working pressure in excess of that to which they are expected to be subjected; and,
- (d) All wells shall be equipped with tubing; a tubing packer must also be utilized in flowing wells unless a waiver is obtained from the Director after demonstrating the casing will not be subjected to excessive pressure or corrosion; all tubing shall be of sufficient internal diameter to allow the passage of a bottom hole pressure gauge for the purpose of obtaining bottom hole pressure measurements.

(80) The gas-oil ratio of all wells not connected to a gas gathering system shall be measured annually during the month of May. The reservoir pressure shall be measured in any well completed in the Ambrose-Bakken Pool if deemed necessary by the Director. Drill stem test pressures are acceptable for determining reservoir pressure. Pressure measurements shall be made at or adjusted to a subsea datum of 5740 feet. All gas-oil ratio and reservoir pressure determinations shall be made by methods approved by the Director and reported to the Director within 15 days following the end of the month in which they are determined. The Director is authorized to waive these requirements if the necessity therefor can be demonstrated to his satisfaction. All additional gas-oil ratio and reservoir pressure determinations conducted on any well, but not specially required herein, shall be reported to the Director within 15 days following the end of the month in which they are determined.

(81) No salt water, drilling mud, crude oil, or waste oil shall be stored in pits in this field, except in an emergency, and approved by the Director.

(82) The first horizontal well completed in each Ambrose-Bakken Pool non-overlapping spacing unit shall be allowed to produce at a maximum efficient rate.

(83) All wells completed in the Ambrose-Bakken Pool that have received an exemption to North Dakota Century Code Section 38-08-06.4 shall be allowed to produce at a maximum efficient rate.

(84) All infill horizontal wells, including overlapping spacing units, completed in the Ambrose-Bakken Pool, shall be allowed to produce at a maximum efficient rate for a period of 90 days commencing on the first day oil is produced through well-head equipment into tanks from the ultimate producing interval after casing has been run; after that, such wells shall be allowed to continue to produce at a maximum efficient rate if the well or operator meets or exceeds the Commission approved gas capture goals. The gas capture percentage shall be calculated by summing monthly gas sold plus monthly gas used on lease plus monthly gas processed in a Commission approved beneficial manner, divided by the total monthly volume of associated gas produced by the operator. The operator is allowed to remove the initial 14 days of flowback gas in the total monthly volume calculation. The Commission will accept compliance with the gas capture goals by well, field, county, or statewide by operator. If such gas capture percentage is not attained at maximum efficient rate, the well(s) shall be restricted to 200 barrels of oil per day if at least 60% of the monthly volume of associated gas produced from the well is captured, otherwise oil production from such wells shall not exceed 100 barrels of oil per day.

The Commission will recognize the following as surplus gas being utilized in a beneficial manner:

- (a) Equipped with an electrical generator that consumes surplus gas from the well;
- (b) Equipped with a system that intakes the surplus gas and natural gas liquids volume from the well for beneficial consumption by means of compression to liquid for use as fuel, transport to a processing facility, production of petrochemicals or fertilizer, conversion to liquid fuels, separating and collecting the propane and heavier hydrocarbons; and
- (c) Equipped with other value-added processes as approved by the Director which reduce the volume or intensity of the flare by more than 60%.

(85) If the flaring of gas produced with crude oil from the Ambrose-Bakken Pool is determined by the North Dakota Department of Health as causing a violation of the North Dakota Air Pollution Control Rules (NDAC Article 33-15), production from the pool may be further restricted.

(86) This order shall cover all of the Ambrose-Bakken Pool, common source of supply of crude oil and/or natural gas as herein defined, and continues in full force and effect until further order of the Commission or until the last well in the pool has been plugged and abandoned.

Dated this 26th day of July, 2016.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ Jack Dalrymple, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Doug Goehring, Agriculture Commissioner