

**STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION**

**APPLICATION OF CHISHOLM ENERGY OPERATING,
LLC FOR A NON-STANDARD SPACING AND
PRORATION UNIT AND COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.**

**CASE NOS. 16115 and 16116 (*de novo*)
ORDER NO. R-14876-A**

ORDER OF THE COMMISSION

THIS MATTER came before the New Mexico Oil Conservation Commission ("Commission") on the application of Premier Oil & Gas, Inc. ("Premier") for de novo review of Order No. R-14876. The Commission, having conducted a hearing on February 14 and 15, 2019, at Santa Fe, New Mexico, and having considered the testimony and the record in this case, enters the following findings, conclusions, and order.

THE COMMISSION FINDS THAT:

1. Due notice has been given, and the Commission has jurisdiction of these cases and the subject matter under the Oil and Gas Act, NMSA 1978, Section 70-2-13 (1981).
2. The Commission consolidated Case Nos. 16115 and 16116 for hearing and is issuing a single order.
3. In Case No. 16115, Chisholm Energy Operating, LLC (OGRID 327137) ("Applicant" or "Chisholm") seeks approval of a 640.31-acre, more or less, horizontal spacing unit ("Unit 1") for oil and gas production from the Wolfcamp formation, Purple Sage; Wolfcamp (Gas) Pool (Pool code 98220), comprising the E/2 of Section 31, Township 22 South, Range 26 East, and Lot 1, Lot 2, S/2 NE/4, and SE/4 (E/2 equivalent) of Section 6, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico. Applicant further seeks an order pooling all uncommitted interests in Unit 1 for the Wolfcamp formation.
4. Unit 1 would be dedicated to the Ocotillo 6 31 State Com WCB Well No. 2H (API No. 30-015-44835), a horizontal well to be completed with an orthodox location within Unit 1 with a surface-hole location 245 feet from the South line and 1190 feet from the East line, (Unit P) of Section 6, Township 23 South, Range 26 East, and bottom-hole location 330 feet from the North line and 400 feet from the East line (Unit A) of Section 31, Township 22 South, Range 26 East, NMPM. The initial well will target the Wolfcamp B interval within the Wolfcamp formation.

5. Unit 1 is in the Purple Sage; Wolfcamp (Gas) Pool (Pool code 98220), which is governed by 19.15.15.10(B) NMAC, which provides for 320-acre gas spacing units, and by special pool conditions established by Division Order No. R-14262, which requires wells to be located no closer than 330 feet from the unit outer boundary. The proposed Unit 1 and project area consist of four adjacent quarter sections oriented south to north.

6. In Case No. 16116, Chisholm seeks approval of a 320.18-acre, more or less, horizontal oil spacing unit ("Unit" 2) for oil and gas production from the Bone Spring formation, WC-015 G-04 S232628M; Bone Spring Pool (Pool code: 98056), comprising the E/2 E/2 of Section 31, Township 22 South, Range 26 East, and Lot 1, SE/4 NE/4 and E/2 SE/4 (E/2 E/2 equivalent) of Section 6, Township 23 South, Range 26 East, NMPM, Eddy County, New Mexico. Applicant further seeks an order pooling all uncommitted interests in the Unit for the Bone Spring formation.

7. Unit 2 would be dedicated to the Ocotillo 6 31 State Com 3BS Well No. 4H (API No. 30-015-44837), a horizontal well to be completed with an orthodox location within Unit 2 with a surface-hole location 245 feet from the South line and 1260 feet from the East line, (Unit P) of Section 6, Township 23 South, Range 26 East, and a bottom-hole location 330 feet from the North line and 525 feet from the East line (Unit A) of Section 31, Township 22 South, Range 26 East, NMPM. The initial well will target the Second Bone Spring interval within the Bone Spring formation.

8. Unit 2 is located within the WC-015 G-04 S232628M; Bone Spring Pool (Pool code 98056) and is subject to 19.15.15.9(A) NMAC, which provides for 330-foot setbacks from the unit boundaries and standard 40-acre units each comprising a governmental quarter-quarter section. The proposed Unit and project area consist of eight adjacent quarter-quarter sections oriented south to north.

9. Collectively, Unit 1 and Unit 2 are referred to herein as the "Units".

10. The Oil Conservation Division ("Division") held a hearing on May 3, 2018 on the original applications of Chisholm for approval of the Units and, on September 18, 2018, granted the applications in Order No. R-14876.

11. Premier entered an appearance in the Division proceeding and presented witnesses and testimony in opposition to Chisholm's applications. After the Division entered Order No. R-14876, Premier filed timely applications with the Commission for a hearing *de novo*. Premier actively participated in the proceeding before the Commission and again presented witnesses and testimony in opposition to Chisholm's applications.

12. Premier did not file competing applications but objects to the granting of both Chisholm applications. It contends that wells should be drilled in an east-west direction.

13. No other party appeared at the hearing, or otherwise opposed the granting of these applications.

14. Chisholm appeared through counsel and presented the following through testimony and exhibits.

a. Chisholm is party to a farmout agreement which requires it to commence drilling within the subject acreage on or before March 1, 2019 or Chisholm forfeits its interest subject to the farmout agreement.

b. The Bone Spring and Wolfcamp formations in this area are both suitable for development by horizontal drilling.

c. Each tract in the proposed Units can be expected to contribute substantially to production from the target formations.

d. Applicant has a voluntary agreement with approximately 90 percent of the working interest owners in the Units. The only working interest which has not agreed to voluntarily participate in both proposed wells is Premier.

e. Supervision rates of \$7,500/month while drilling and \$700/month while producing are fair and reasonable.

f. Chisholm has been negotiating with Premier to reach voluntary agreement since Chisholm first proposed the subject wells in February 2018. Chisholm has made a good-faith effort to obtain Premier's voluntary agreement. The parties have been unable to reach agreement.

g. The target interval in the Bone Spring formation is located near the top of the Wolfcamp formation. Ownership is identical in the Bone Spring and Wolfcamp formations.

h. Orientation of the proposed horizontal wells from south to north is appropriate for the proposed Units. Multiple geologic factors support Chisholm's preferred well orientation, including proprietary and confidential well log data such as sonic anisotropy and FMI logs, as well as geologic mapping of the area and geochemistry within the proposed intervals. A south-north well orientation is supported by a regional geology study of the maximum stress direction near the proposed units. Regional Isopach maps of the Third Bone Spring and Wolfcamp A upper and lower sandstones, suggest that the south-north is the preferred orientation of the proposed Bone Spring well.

i. In addition to these geologic factors, well production data from existing wells within the proposed target intervals supports a south-north well orientation. Wells within a

twenty-township area in the vicinity of Chisholm's proposed Units are oriented in a south-north or north-south direction compared to an east-west or west-east direction by a factor of 2 to 1. Well production data from wells currently producing in the Wolfcamp B formation in the vicinity of the proposed Units support the conclusion that a south-north orientation will result in greater production than wells oriented in an East-West orientation.

j. Chisholm's witnesses presented evidence and testimony that its analysis of geologic factors and well production data, in the aggregate, favor a south-north well orientation in the area of its proposed Units. A south-north orientation will minimize surface waste and impacts and is the preferred orientation to access and use Chisholm's existing water re-use and recycling facilities.

k. Chisholm has an approved permit from the City of Carlsbad for the surface locations and a casing design to adequately protect the City of Carlsbad's drinking water and the Capitan Aquifer.

l. Notice by certified mail was provided to all uncommitted interest owners in the proposed Unit whose interests were evidenced by a conveyance instrument, either of record or known to Applicant when the Applications were filed, and to heirs known to Applicant of deceased persons who appear as owners in such instruments.

m. Those potentially affected parties whose whereabouts could not be ascertained were noticed by publication as provided in 19.15.4.12(B) NMAC.

n. Chisholm will have infrastructure in place that will allow Chisholm to not vent and flare and commit waste of methane.

o. Chisholm's witnesses presented testimony regarding its casing design to protect the Capitan Aquifer with four strings of casing and its understanding of the environmental concerns associated with drilling in the Capitan Reef.

15. Premier appeared through counsel and presented the following through testimony and exhibits:

a. Premier prefers an east-west orientation of the proposed wells (the Ocotillo 6 31 State Com WCB Well No. 2H (API No. 30-015-44835) and Ocotillo 6 31 State Com 3BS Well No. 4H (API No. 30-015-44837)) (the "Proposed Wells").

b. Premier also prefers east-west oriented wells because of surface issues and concerns about the Carlsbad water well field. Premier stated that the surface topography and the proximity of the surface location of Chisholm's proposed wells to the Carlsbad City Water Field creates environmental issues.

c. Premier provided engineering testimony in the form of decline curve analyses that east-west oriented wells have greater oil and gas reserves versus wells that were drilled north-south. The comparison wells were from the same operator and were selected based on similar completion methods and intervals but were completed in different zones than the wells proposed by Chisholm. The comparison wells are operated by Matador Production Company and located approximately 10 miles to the east/southeast in Section 12, Section 13, Section 14, Section 23, Section 24, and Section 25, all in Township 23 South, Range 27 East (collectively the "Matador Wells"). Premier's analyses did not differentiate production performance in wells producing different Wolfcamp intervals, nor did Premier include producing wells in correlated intervals in closer proximity to Chisholm's proposed Units.

d. Premier provided testimony from experts in petrophysics and geology stating that the maximum stress orientation in the area where Chisholm's wells are proposed favor an east-west orientation as opposed to a south-north orientation. However, Premier's experts did not evaluate other geologic factors which were considered by Chisholm in its analysis.

THE COMMISSION CONCLUDES THAT:

16. Premier does not have a valid competing well proposal covering the same or similar acreage.

17. Chisholm is at risk of forfeiting a contractual interest if it is unable to proceed to commence drilling on or before March 1, 2019.

18. Chisholm and Premier have presented competing arguments over the preferred drilling direction, where the facilities of the wells should be located, and other issues. Chisholm presented substantial testimony and evidence demonstrating that the geology and well production data supports its preferred south-north well orientation in the area of the proposed Units; that its well design and surface operations will protect the environment and fresh water sources, including the Capitan Aquifer; and that its operations will protect against subsurface and surface waste.

19. Approval of the Units will result in efficient production of the reserves underlying the Units, thereby preventing waste, and will not impair correlative rights.

20. Two or more separately owned tracts are embraced within the Units and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Units that are separately owned.

21. Chisholm is the owner of an oil and gas working interest within the Units. Thus, Chisholm had the right to drill the well to a common source of supply within the Units.

22. There is an interest owner in the Units who has not agreed to pool its interests.

23. To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste, and afford to each interest owner the opportunity to recover or receive without unnecessary expense its just and fair share of hydrocarbons, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas within the Units.

24. The Units being pooled in each case should include the entire Bone Spring and Wolfcamp formations, respectively.

25. Chisholm's proposed Units should be approved to enable it to drill horizontal wells that will efficiently produce the reserves underlying the Units, thereby preventing waste and protecting correlative rights.

26. Chisholm Energy Operating, LLC (OGRID 372137) should be designated the operator of the Proposed Wells and the Units.

27. Infill wells within the Units should be subject to 19.15.13.9 NMAC through 19.15.13.10 NMAC, and to the terms and conditions of this order.

28. Any pooled working interest owner who does not pay its share of estimated well costs of any well should have withheld from production from such well its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in drilling the Proposed Wells.

29. Reasonable charges for supervision (combined fixed rates) should be fixed at \$7,500 per month, per well, while drilling and \$750 per month, per well, while producing, provided that these rates should be adjusted annually pursuant to the overhead adjustment provision of the COPAS form titled "*Accounting Procedure-Joint Operations*".

IT IS THEREFORE ORDERED THAT:

1. The applications of Chisholm in Cases No. 16115 and 16116, as detailed below, are approved.

2. In Case No. 16115, a 640.31-acre (more or less) horizontal gas spacing unit ("Unit 1") for oil and gas production from the Wolfcamp formation, [Purple Sage; Wolfcamp Gas Pool (Pool Code 98220)] comprised of the E/2 of Section 31, Township 22 South, Range 26 East and the E/2 of Section 6, Township 23 South, Range 26 East NMPM, Eddy County, New Mexico, is hereby approved.

3. Unit 1 in Case No. 16115 shall be dedicated to Chisholm's Ocotillo 6 31 State Com WCB Well No. 2H (API No. 30-015-44835), a horizontal well to be completed with an orthodox location within Unit 1 with a surface-hole location 245 feet from the south line and

1190 feet from the east line, (Unit P) of Section 6, Township 23 South, Range 26 East, and bottom-hole location 330 feet from the north line and 400 feet from the east line (Unit A) of Section 31, Township 22 South, Range 26 East, NMPM.

4. In Case No. 16116, a 320.18-acre (more or less) horizontal oil spacing ("Unit" 2) for oil and gas production from the Bone Spring formation, [Wildcat; Bone Spring Oil Pool (Pool Code 98056)] comprised of the E/2 E/2 of Section 31, Township 22 South, Range 26 East and the E/2 E/2 of Section 6, Township 23 South, Range 26 East NMPM, Eddy County, New Mexico, is hereby approved.

5. Unit 2 in Case No. 16116 shall be dedicated to Chisholm's Ocotillo 6 31 State Com 3BS Well No. 4H (API No. 30-015-44837), a horizontal well to be completed with an orthodox location within Unit 2 with a surface-hole location 245 feet from the south line and 1260 feet from the east line, (Unit P) of Section 6, Township 23 South, Range 26 East, and a bottom-hole location 330 feet from the north line and 525 feet from the east line (Unit A) of Section 31, Township 22 South, Range 26 East, NMPM.

6. Chisholm Energy Operating, LLC (OGRID 372137) is hereby designated the operator of the Proposed Wells and Units 1 and 2, as defined above.

The following shall apply respectively to each of the two approved Units

7. All uncommitted interests, whatever they may be, in the oil and gas in the Unit, are hereby pooled.

8. Upon final plugging and abandonment of the Proposed Wells and any other well drilled on the Units pursuant to 19.15.13.9 NMAC, the pooled Units shall terminate, unless this order has been amended to authorize further operations.

9. Infill wells within the Units shall be subject to the terms and conditions of this order.

10. After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interests in the Unit, including unleased mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, Chisholm shall furnish the Division and each known pooled working interest owner in the Unit a separate itemized schedule of estimated costs of drilling, completing, and equipping each proposed well ("well costs").

11. Within 30 days from its receipt of the schedule of estimated well costs for any well, any pooled working interest owner shall have the right to pay its share of estimated well costs to the operator in lieu of paying its share of reasonable well costs out of production as

hereinafter provided, and any such owner who pays its share of estimated well costs as provided above for any well shall remain liable for operating costs but shall not be liable for risk charges for such well. Pooled working interest owners who elect not to pay their share of estimated well costs as provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners".

12. Chisholm shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs of each well within 90 days following completion of each proposed well. If no objection to the actual well costs is received by the Division, and the Division has not objected, within 45 days following receipt of the schedule, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs after public notice and hearing.

13. Within 60 days following determination of reasonable well costs for any well, any pooled working interest owner who has paid its share of estimated costs of such well or wells in advance as provided above shall pay to Chisholm its share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator the amount, if any, that the estimated well costs it has paid exceed its share of reasonable well costs.

14. Chisholm is hereby authorized to withhold the following costs and charges from each non-consenting working interest owner's share of production from each well:

- a. The proportionate share of reasonable well costs attributable to such interest; and
- b. As a charge for the risk involved in drilling the well, 200% of the above costs.

15. Chisholm shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.

16. Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$7,500 per month, per well, while drilling and \$750 per month, per well, while producing, provided that these rates may, at Chisholm's election, be adjusted annually pursuant to the overhead adjustment provisions of the COPAS form titled "*Accounting Procedure- Joint Operations*". Chisholm is authorized to withhold from each pooled working interest owner's share of production from each well the proportionate share of both the supervision charges and the actual expenditures required for operating such well, not more than what are reasonable.

17. During the cost recovery period, Chisholm shall furnish to the Division and to each known non-consenting pooled working interest owner, annually, and within 90 days after

payout occurs, a schedule of all revenues attributable to each Proposed Well, and all charges for supervision and operating costs charged against such revenues. Operating costs shall include all reasonable costs incurred for the maintenance and operation of the well, except for "well costs" reported pursuant to requirements herein, that are properly chargeable to the joint account pursuant to COPAS procedures. If no objection to the operating costs is received by the Division, and the Division has not objected, within 45 days following receipt of any schedule, the costs shall be deemed to be the reasonable operating costs. If there is an objection to the accuracy or reasonableness of operating costs reported within the 45-day period, the Division will determine reasonable operating costs after public notice and hearing.

18. Except as provided above, all proceeds of production from the Proposed Wells that are not disbursed for any reason shall be held for the account of the person or persons entitled thereto pursuant to the Oil and Gas Proceeds Payment Act (NMSA 1978, Sections 70-10-1 through 70-10-6, as amended). If not disbursed, such proceeds shall be turned over to the appropriate authority as and when required by the Uniform Unclaimed Property Act (NMSA 1978, Sections 7-8A-1 through 7-8A-31, as amended).

19. Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for allocating costs and charges under this Order. Any costs that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs shall be withheld from production attributable to royalty interests.

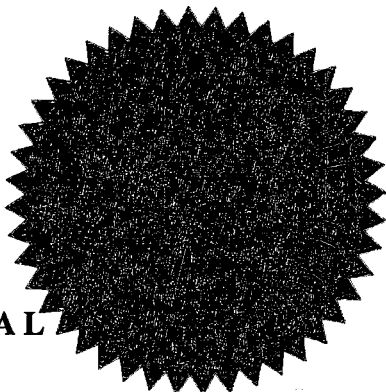
20. Should all the parties to this compulsory pooling order reach voluntary agreement after entry of this order, this order shall thereafter be of no further effect.

21. Chisholm shall notify the Commission in writing of the subsequent voluntary agreement of any party subject to the compulsory pooling provisions of this order.

22. Jurisdiction of this case is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the 12th day of March 2019.

SEAL



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


GABRIEL WADE, Chair