STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

APPLICATION OF CIMAREX ENERGY CO. FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, CHAVES COUNTY, NEW MEXICO

(De Novo) CASE NO. 14966 ORDER NO. R-13708-A

ORDER OF THE COMMISSION

This matter comes before the New Mexico Oil Conservation Commission ("Commission") on the application of Cimarex Energy Co. for an order approving a 240-acre non-standard spacing and proration unit. The Commission having conducted a hearing on October 10, 2013, 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 this case and of the subject matter.
- 2. Cimarex Energy Co. ("Applicant"), seeks an order approving a 240-acre non-standard oil spacing and proration unit and project area (the "Unit") in the Abo/Wolfcamp formation comprised of the N/2 NE/4 of Section 8 and N/2 N/2 of Section 9, Township 15 South, Range 31 East, NMPM, Chaves County, New Mexico. Applicant further seeks the pooling of all uncommitted mineral interests in the Unit in the Abo/Wolfcamp formation.
- 3. The Unit will be dedicated to the Independence 8 Federal Com. Well No. 1H (API No. 30-005-29151), a horizontal well drilled at a surface location 510 feet from the North line and 2310 feet from the East line (Unit B) of Section 8. The well penetrated the Abo/Wolfcamp formation at an orthodox oil well location in Unit B of Section 8 and continued horizontally in the Abo/Wolfcamp to a standard terminus 660 feet from the North line and 330 feet from the East line (Unit A) of Section 9.
- 4. This is a wildcat well in the Abo/Wolfcamp formation and is governed by NMAC 19.15.15.9.A, which provides for standard 40-acre well units comprised of a governmental quarter-quarter section. The completed

interval of the well is entirely within the prescribed setbacks from the outer boundary of the project area.

- 5. This matter was heard before the New Mexico Oil Conservation Division ("Division") on April 4, 2013, resulting in Division Order No. R-13708, which denied the application. The Division held, *inter alia*, that:
 - (a) The geology showed a zero contour line or pinchout of the reservoir in the NW/4 NE/4 of Section 8, and the N/2 NE/4 of Section 8 would be less productive, "quite possibly substantially less productive", than the N/2 N/2 of Section 9.
 - (b) Including the less productive, or unproductive, acreage in Section 8 within the 240-acre well unit would impair the correlative rights of interest owners in the N/2 N/2 of Section 9.
 - (c) Under Division Order No. R-13425-A, the Division held that non-standard units exceeding 160 acres should only be granted in unusual cases.
- 6. Applicant appealed the Division Order de novo to the Commission. COG Operating LLC ("COG") intervened in this case before the Commission.
- 7. The Commission held a hearing on October 10, 2013. Applicant presented three witnesses: Hilary Coder, Meera Ramoutar and Jason Billings. COG appeared and presented one witness, Jayne Krawietz. No other party entered an appearance or opposed this application.
- 8. Before the Commission, Applicant presented geologic and engineering evidence as follows:
 - (a) Applicant provided notice to interest owners and offset operators within the Unit. (Cimarex Exh. 3, 4, 5, 6, 7, 8)
 - (b) The Independence 8 Fed. Com. Well No. 1H was drilled in July 2013. The well included a pilot hole. (Cimarex Exh. 1, 2)
 - (c) The original reservoir pinchout line was based on well control and seismic data, but there is no well control to the immediate north and west of the well.
 - (d) Well logs show that the pilot hole and the horizontal wellbore in the Abo/Wolfcamp formation are hydrocarbon productive. (Cimarex Exh. 9)

- (e) The reservoir pinchout is now calculated to be located to the north and west of the N/2 NE/4 of Section 8.
- (f) Mud logs indicate that the wellbore in the N/2 NE/4 of Section 8 is at least as productive as the wellbore in the N/2 N/2 of Section 9.
- (g) Applicant's depositional model shows that the reservoir closest to the pinchout has higher oil saturation than the reservoir further from the pinchout.
- (h) Wells in this pool near the reservoir pinchout have, on average, greater recoveries than wells further from the pinchout. (Cimarex Exh. 10)
- (i) The 240-acre lateral for the adjoining 8 Fed. Com. Well No. 2H has greater productivity than nearby 160-acre laterals. (Cimarex Exh. 11)
- 9. COG presented engineering evidence as follows:
- (a) COG plans to drill a total of 17 horizontal wells in 2013 that will have a lateral longer than 1 mile ("extended laterals") in the Delaware Basin, located in Southeast New Mexico. In 2014, COG plans to drill 26 (and probably more) extended laterals in the same area. (COG Exh. 1)
- (b) COG has conducted a cost-benefit analysis on its extended laterals drilled this year.
- (c) COG has seen a 30-60% cost increase on its extended laterals compared to a one mile long lateral, and 60-100% more reserve recovery. (For example, a 1.5 mile lateral costs 1.33 times more than a one mile lateral, but COG sees 1.6 times more reserves.) (COG Exh. 3, 4)
- (d) COG prefers to drill extended laterals when possible because Division required setbacks are avoided, a second curve is avoided, and there ultimately is a greater completed (treatable) lateral length for a horizontal well. (COG Exh. 2, 5)
- (e) COG has concluded that drilling a longer treatable lateral length increases recoverable reserves, results in a more economic well, and ultimately prevents waste.
- (f) COG also sees other benefits by drilling extended laterals, including less surface disturbance, reduced impact in environmentally

sensitive areas, and less regulatory paperwork for the company and the Division.

THE COMMISSION CONCLUDES THAT:

- 1. Notice of the Unit was provided to all surrounding affected parties within the Abo/Wolfcamp formation. No offset interest owner objected to the Unit. Notice of this compulsory pooling application was provided to all uncommitted interest owners.
 - 2. All 40-acre well units in the Unit are productive.
- 3. There is no impairment of correlative rights from the drilling of the well.
- 4. The Commission adopted amended rules specific to the regulation of horizontal wells by Order No. R-13499. 19.15.16.15 NMAC. These rules were effective February 15, 2012. Division Order No. R-13425-A predates Commission Order No. R-13499.
- 5. The amended horizontal well rules do not restrict the lateral length of a horizontal well that may be drilled, or the size of a non-standard spacing unit for a horizontal well which may be compulsory pooled.
- 6. The Commission, therefore, does not adopt a "standard non-standard spacing unit" for pooling for a horizontal well and does not distinguish among the lengths of laterals.
- 7. Accordingly, the Unit should be approved and pooling of the uncommitted interests in the Unit should be approved. Approval of the Unit will enable Applicant to drill a horizontal well that will efficiently produce the reserves underlying the Units, thereby preventing waste and the drilling of unnecessary wells, and will not impair correlative rights.
- 8. Two or more separately owned tracts are embraced within the Unit and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Unit that are separately owned.
- 9. There are interest owners in the Unit who have not agreed to pool their interests. 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 Unit.

- 10. Cimarex Energy Co. of Colorado (OGRID No. 162683) should be designated the operator of the well and of the Unit.
- 11. Any pooled working interest owner who does not pay its share of estimated costs should have withheld from production its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in drilling the well.
- 12. Reasonable charges for supervision (combined fixed rates) should be fixed at \$7000 per month while drilling and \$700 per month while producing, provided that these rates should be adjusted annually pursuant to Section III.1.A.3 of the COPAS form titled "Accounting Procedure-Joint Operations."

IT IS THEREFORE ORDERED THAT:

- 1. A non-standard 240-acre, more or less, oil spacing and proration unit is hereby established for oil and gas production from the Abo/Wolfcamp formation consisting of the N/2 NE/4 of Section 8 and N/2 N/2 of Section 9, Township 15 South, Range 31 East, NMPM, Chaves County, New Mexico.
- 2. All uncommitted interests, whatever they may be, in the oil and gas in the Abo/Wolfcamp formation underlying the non-standard oil spacing and proration unit, are hereby pooled.
- 3. The Unit shall be dedicated to Applicant's Independence 8 Federal Com. Well No. 1H (API No. 30-005-29151), a horizontal well drilled at a surface location 510 feet from the North line and 2310 feet from the East line (Unit B) of Section 8. The well penetrated the Abo/Wolfcamp formation at an orthodox oil well location in Unit B of Section 8 and continued horizontally in the Abo/Wolfcamp to a standard terminus 660 feet from the North line and 330 feet from the East line (Unit A) of Section 9.
- 4. Cimarex Energy Co. of Colorado (OGRID 162683) is hereby designated the operator of the well and of the Unit.
- 5. The operator of the Unit shall commence completion of the horizontal well on or before December 1, 2013 and shall thereafter continue completing the well with due diligence in a horizontal easterly direction to test the Abo/Wolfcamp formation.
- 6. Should the proposed well not be completed within 180 days after commencement thereof, then Ordering Paragraphs (1), (2), and (3) shall be of no further effect, and the Unit and project area created by this Order shall terminate, unless operator appears before the Division Director and obtains an extension of the time for completion of the proposed well for good cause shown by satisfactory evidence.

- 7. Upon final plugging and abandonment of the proposed well and any other well drilled on the Unit pursuant to NMAC 15.19.13 Sections 9-11, the pooled Unit created by this Order shall terminate, unless this Order has been amended to authorize further operations.
- 8. After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interest 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, the operator shall furnish the Division and each known pooled working interest owner in the Unit an itemized schedule of estimated costs of drilling, completing, and equipping the well ("well costs").
- 9. Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to Applicant in lieu of paying his share of reasonable well costs out of production as hereinafter provided. A pooled working interest owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges. 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".
- 10. Applicant shall furnish the Commission and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the well; if no objection to the actual well costs is received by the Commission and the Commission has not objected within 45 days following receipt of said schedule, the actual well costs shall be the reasonable well costs; provided, however, that if there is objection to actual well costs within said 45-day period the Commission will determine reasonable well costs after public notice and hearing.
- 11. Within 60 days following the determination of reasonable well costs, any pooled working interest owner who has paid his or its share of estimated costs in advance as provided above shall pay to Applicant his or its share of the amount that reasonable well costs exceed estimated well costs or shall receive from Applicant the amount, if any, that the estimated well costs that he or it has paid exceed his or its share of reasonable well costs.
- 12. Applicant is hereby authorized to withhold the following costs and charges from production:
 - (a) the proportionate share of reasonable well costs attributable to each non-consenting working interest owner; and

- (b) as a charge for the risk involved in drilling the wells, 200% of the above costs.
- 13. Applicant shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.
- 14. Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$7000 per month while drilling and \$700 per month while producing, provided that these rates shall be adjusted annually pursuant to Section III.1.A.3. of the COPAS form titled "Accounting Procedure-Joint Operations." Applicant is authorized to withhold from production the proportionate share of both the supervision charges and the actual expenditures required for operating the well, not in excess of what is reasonable, that are attributable to the pooled working interest owners.
- 15. Should all of the parties to this compulsory pooling order reach voluntary agreement subsequent to the entry of this order, the order shall thereafter be of no further effect.
- 16. Applicant shall notify the Commission in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order.
- 17. Jurisdiction over this case is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on this 21st day of November, 2013.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION.

ROBERT BALCH, Member

TERRY WARNELL, Member

JAMI BAILEY, Chair

SEAL