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

APPLICATION OF CIMAREX ENERGY FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

Case No. 14703

Case No. 14704

Case No. 14705

Case No. 14698

APPLICATION OF COG OPERATING LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT, NON-STANDARD LOCATION AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO. Case No. 14725

Case No. 14726

### PROPOSED ORDER OF COG OPERATING LLC

These competing applications were consolidated by the Division and initially came on for hearing on September 1, 2011, in Santa Fe, New Mexico, before Examiners Terry Warnell and David K. Brooks whereupon evidence was taken. On September 29, 2011, these matters were called again before Examiners ------ to address certain notice issues.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 2011, the Division Director, having considered the testimony, the record and the recommendations of the Examiner on these competing applications,

#### FINDS THAT:

- (1) Due public notice has been given, and the Division has jurisdiction of these cases and their subject matter.
- (2) In Case Nos. 14703, 14704, 14705 and 14698, Cimarex Energy Company ("Cimarex") seeks an order pooling all uncommitted interests from the surface to the base of the Glorieta-Yeso formation underlying the SE/4 of Section 6, Township 19 South, Range 26 East, NMPM., Eddy County, New Mexico to form the following 40-acre oil spacing and proration units for four <u>vertical</u> wells:

- a. The NW/4 SE/4 of Section 6 to be dedicated to its proposed Colorado 6 Fee Well No. 1, to be drilled at a standard location;
- b. The NE/4 SE/4 of Section 6 to be dedicated to its proposed Colorado 6 Fee Well No. 2, to be drilled at a standard location;
- c. The SW/4 SE/4 of Section 6 to be dedicated to its proposed Colorado 6 Fee Well No. 5, to be drilled at a standard location; and
- d. The SE/4 SE/4 of Section 6 to be dedicated to its proposed Kansas 6 Fee Well No. 1, to be drilled at a standard location.
- (3) In Case Nos. 14725 and 14726, COG seeks an order pooling all uncommitted interests in the Glorieta-Yeso formation underlying the E/2 of said Section 6 to form the following non-standard 160-acre spacing and proration units or project areas for two full-section horizontal wells:
  - a. The W/2 E/2 of said Section 6 to be dedicated to COG's proposed Arabian "6" Fee Well No. 7H, to be horizontally drilled from a surface location 150 feet from the South line and 1700 feet from the East line (Unit O) to a bottom hole location 330 feet from the North line and 1700 feet from the East line (Unit B); and
  - b. The E/2 E/2 of said Section 6 to be dedicated to COG's proposed Arabian "6" Fee Well No. 8H, to be horizontally drilled from a surface location 150 feet from the South line and 380 feet from the East line (Unit P) to a bottom hole location 330 feet from the North line and 380 feet from the East line (Unit A).
- (4) The spacing in this area is governed by statewide Rule 15.9.A, which provides for standard 40-acre units, each comprising a governmental quarter-quarter section. The two 160-acre spacing and proration units proposed by COG each consist of four adjacent quarter-quarter sections.
- (5) Each of COG's proposed full-section horizontal wells will penetrate the Glorieta-Yeso formation at standard oil well locations.
- (6) Both COG and Cimarex have the right to drill within the proposed spacing units, and both seek to be named operator of their respective proposed wells and spacing units.
  - (7) Neither Cimarex nor COG dispute wells costs, well locations, or geology.
- (8) Both Cimarex and COG are targeting the Paddock producing zone in the Glorieta-Yeso formation at a depth of around 3000 feet.
- (9) These applications require the Division to determine which of the competing development plans are in the best interests of the working interest owners in the SE/4 of Section 6, in the best interests of conservation and in the best interests of the prevention of waste.

- (10) With respect to the working interest ownership in the SE/4 of Section 6, the evidence presented indicates the following:
  - a. Cimarex, COG, Yates Petroleum Corporation, MYCO Industries, Inc., Abo Petroleum Corporation, DHA, LLC, and Oxy Y-1 Company hold leasehold interests in the SE/4 of Section 6. See COG Exhibits 6 and 8; Cimarex Ex. 1.
  - b. COG holds a 30.3% interest in the SE/4 of Section 6 by virtue of a Development Agreement executed with Yates Petroleum Corporation and a lease from the Estate of Don L. Bradshaw. See COG Exs. 6, 7, 8; Cimarex Ex. 1; Dirks Testimony.
  - c. COG presented testimony and documentary evidence in the form of July 2011 Mineral Ownership Reports prepared by a third party title company indicating that as much as 25% of the leasehold interest in the SE/4 of Section 6 remains unleased. See COG Exhibits 6 and 8; Dirks Testimony.
  - d. The Mineral Ownership Reports and testimony presented by COG at the hearing supports the following ownership breakdown in the SE/4 of Section 6:

COG/Yates Petroleum: 30.3%
Cimarex: 25%
DHA, LLC 8.72%
Abo Petroleum Corp.: 3.75%
Myco Industries: 3.75%
Oxy Y-1: 3.75%
Unleased mineral interests: 25%

See COG Exhibits 6 and 8; Dirks Testimony.

- e. While Cimarex presented testimony claiming it has leased all of the remaining 25% leasehold interests (Cimarex Ex. 1), the Mineral Ownership Reports and testimony presented by COG disputes this claim and Cimarex presented no leases, title opinions, mineral ownership reports or other documentary evidence to substantiate its claims.
- (11) COG presented evidence that it discussed the proposed full-section horizontal development plans with all of the working interest owners in the SE/4 of Section 6. See Dirks Testimony.
- (12) The evidence establishes the following with respect to the positions of the working interest owners in the SE/4 of Section 6:

Dirks

a. Yates Petroleum Corporation, MYCO Industries, Inc., and Abo Petroleum Corporation appeared at the hearing and submitted a letter in support of COG's full-section horizontal wells for the Glorieta-Yeso formation stating:

We believe that COG's horizontal well proposals provide a more efficient and effective means of recovering the reserves in this formation underlying the E/2 of Section 6, including those reserves in the SE/4 of Section 6.

See COG Ex. 9.

- b. COG also presented a letter from DHA, LLC, supporting COG's full-section horizontal wells and likewise expressing the opinion that COG's proposed horizontal wells provide a more efficient and effective means of recovering the reserves in the Glorieta-Yeso formation underlying the SE/4 of Section 6. See COG Ex. 9 (page 2).
- c. COG's landman testified the company has discussed its proposed full-section horizontal wells with Oxy Y-1 and that it favors COG's proposed horizontal development plan over the vertical development plan proposed by Cimarex. See Dirks Testimony.
- d. Shortly before the hearing, COG initiated a meeting with Cimarex but the companies were unable to resolve their competing development plans. See Dirks Testimony.
- (13) The evidence establishes that with the exception of Cimarex, all of the remaining working interest owners in the SE/4 of Section 6 believe COG's proposed full-section horizontal wells provide a more efficient and effective means of recovering the reserves in the Glorieta-Yeso formation underlying this acreage than Cimarex's proposed vertical wells.
- (14) With respect to the development of the Paddock zone in nearby areas, the evidence indicates:
  - a. The Dayton Field to the northeast of the subject area is an older field that was developed using, at times, more than one vertical well per 40 acre spacing unit. See COG Ex. 10.
  - b. The Dagger Draw and Cemetery Fields to the southwest of the subject area have been developed more recently using north-south horizontal wells, many of which extend for an entire section. *See* COG Ex. 10.
  - c. There have been five vertical wells drilled in the Paddock zone in the nine sections surrounding Section 6. See COG Ex. 10.

- d. Despite modern completion techniques, the production history of these five vertical wells indicates an average EUR of only 6-11 MBO. See COG Ex. 15; Testimony of Mr. Midkiff.
- e. The production history of the more recent full-section horizontal wells in the Dagger Draw and Cemetery Fields to the southwest of the subject area indicates an average EUR of 230 MBO. *See* COG Exs. 17-18; Testimony of Mr. Midkiff.
- f. The production history of the two full-section horizontal wells in the Dagger Draw field that are closest to the subject area (Sections 24 and 25, T-19-S, R-25-E) indicate an average EUR above 230 MBO. See COG Ex. 17, 18 (red and blue lines); Testimony of Mr. Midkiff.
- (15) The geologic characteristics of the Paddock zone from the Dayton Field through the subject area and down to the Dagger Draw field are consistent. COG Exs. 11–14; Testimony of Mr. Reyes.
- (16) There appear to be no faults or other geologic impediments to full-section horizontal development in the subject area. COG Exs. 11–14; Testimony of Mr. Reyes.
- (17) The recovery rates from the five vertical wells drilled in the Paddock zone in nine section area surrounding Section 6, the development costs from the Cimarex AFE's, and current oil prices indicate Cimarex's proposed vertical wells will not be commercially successful. See COG Exs. 15, 16; Testimony of Mr. Midkiff.
- (18) The recovery rates from the full-section horizontal wells in the Paddock zone in the Dagger Draw and Cemetery Fields to the southeast of the subject area, the development costs from the COG AFE's, and current oil prices indicate that COG's proposed full-section horizontal wells will be commercially successful. See COG Exs. 17, 18, 19; Testimony of Mr. Midkiff.
- (19) A comparison of the development costs associated with the current competing development plans and the recovery rates from vertical and horizontal wells in the area indicate that full section horizontal well development provides the best opportunity for economic success for the working interest owners in the SE/4 of Section 6. See COG Ex. 20; Testimony of Mr. Midkiff.
- (20) The staking pattern for Cimarex's proposed vertical well development plan indicates the company anticipates drilling up to four wells per 40-acres to fully develop the Paddock zone. See Cimarex Exs. 2A, 2B, 2C and 2D; Testimony of Mr. Midkiff.
- (21) The Division's current rules will allow up to sixteen vertical wells in the Paddock zone in the SE/4 of Section 6, and a total of thirty-two vertical wells in the Paddock zone in the E/2 of Section 6. See COG Exs. 21, 24; Testimony of Mr. Midkiff.

- (22) COG's proposed full-section horizontal well development plan will allow the Paddock zone in the entire E/2 of Section 6 to be fully developed with only four well locations. See COG Exs. 22, 25; Testimony of Mr. Midkiff.
- (23) A comparison of the anticipated recovery rates with the development costs associated with "full pattern" vertical well development and "full pattern" horizontal well development indicates COG's full-section horizontal development proposals provide the working interest owners in the SE/4 of Section 6 with best chance of economic success. *See* COG Exs. 23, 26; Testimony of Mr. Midkiff.
- (24) An examination of the recovery rates from vertical and horizontal wells in the area indicate that full section horizontal well development will recover more hydrocarbons from the Paddock zone underlying the SE/4 of Section 6 than vertical well development, thereby preventing waste. See COG Exs. 15-16, 18-19, 20, 23, 26 and 27; Testimony of Mr. Midkiff.
- (25) COG's proposed full-section horizontal development plan will require fewer well locations, and thereby less surface disturbance, than Cimarex's competing vertical well development plan. *See* COG Exs. 16, 19, 21, 22, 24, and 25.
- (26) Shorter half-section or three-quarter section horizontal wells in the Paddock zone in this area lessen the chance of economic success for the working interest owners in the SE/4 of Section 6. See Testimony of Mr. Midkiff.
- (27) The evidence indicates that all of the working interest owners in the SE/4 of Section 6 except Cimarex favor development of the Glorieta-Yeso under COG's proposed full-section horizontal well development plans.
- (28) The evidence indicates COG's proposed full-section horizontal well development plan offers the working interest owners in the SE/4 of Section 6 with the best chance of economic success.
- (29) The evidence indicates COG's proposed full-section horizontal well development plan is likely to recover more hydrocarbons from the Paddock zone than Cimarex's proposed vertical well development plan, thereby preventing waste.
- (30) There is no debate that COG's proposed full-section horizontal well development plan will result in less surface disturbance than Cimarex's proposed vertical well development plan.
- (31) The evidence indicates COG's proposed full-section horizontal well development plan is in the best interests of conservation, the prevention of waste and the protection of correlative rights.
- (32) Unlike the circumstances resulting in Order No. R-13091 (referenced by Cimarex at the hearing), this case presents "compelling factors" that warrant determination of operatorship in the SE/4 of Section 6 based on the development plan that was the subject of

discussions with the affected working interest owners, that meets the desires of the other affected working interest owners in the subject area, that appears to provide the working interest owners with the best chance of economic success, that is likely to recover the most hydrocarbons, and which will result in less surface disturbance.

- (33) Cimarex's applications for vertical well development in the Glorieta-Yeso formation underlying the SE/4 of Section 6 should be denied in favor of COG's applications for full-section horizontal well development in the Glorieta-Yeso formation in the E/2 of Section 6.
- (34) Two or more separately owned tracts are embraced within COG's proposed units, and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more of the tracts that are separately owned.
- (35) There are interest owners in the proposed spacing units that have not agreed to pool their interests.
- (36) To avoid the drilling of unnecessary wells, protect correlative rights, and prevent waste, and to afford to the owner of each interest in the units the opportunity to recover or receive without unnecessary expense its just and fair share of hydrocarbons, COG's applications to pool all uncommitted interests, whatever they may be, within the proposed units or project areas should be approved.
- (37) Any pooled working interest owner who does not pay its share of the estimated well costs should have withheld from production its share of reasonable well costs plus an additional 200% (pursuant to Rule 35.A) thereof as a reasonable charge for the risk involved in drilling the well.
- (38) Reasonable charges for supervision (combined fixed rates) should be fixed at \$6,000 per month while drilling and \$600 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 Join Operations".

#### IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the application of COG Operating LLC in Case No. 14725, all uncommitted interests in the Glorieta-Yeso formation underlying the W/2 E/2 of Section 6, Township 19 South, Range 26 East, NMPM, Eddy County, New Mexico are hereby pooled to form a non-standard 160-acre spacing and proration unit and project area. This unit and project area shall be dedicated to COG's proposed Arabian "6" Fee Well No. 7H, to be horizontally drilled from a surface location 150 feet from the South line and 1700 feet from the East line (Unit O) to a bottom hole location 330 feet from the North line and 1700 feet from the East line (Unit B) of said Section 6.
- (2) Pursuant to the application of COG Operating LLC in Case No. 14726, all uncommitted interests in the Glorieta-Yeso formation underlying the E/2 E/2 of Section 6, Township 19 South, Range 26 East, NMPM, Eddy County, New Mexico are hereby pooled to

form a non-standard 160-acre spacing and proration unit and project area. This unit and project area shall be dedicated to COG's proposed Arabian "6" Fee Well No. 8H, to be horizontally drilled from a surface location 150 feet from the South line and 380 feet from the East line (Unit P) to a bottom hole location 330 feet from the North line and 380 feet from the East line (Unit A).

- (3) COG Operating LLC (OGRID No. 229137) is hereby designated operator of the proposed wells and of the two non-standard 160-acre spacing units.
- (4) The applications of Cimarex in Case Nos. 14,703, 14,704, 14,705 and 14,698 are hereby denied without prejudice.
- (5) COG shall commence drilling of the proposed wells on or before \_\_\_\_\_\_\_, 2011, and shall thereafter continue drilling with due diligence to test the Glorieta-Yeso formation.
- (6) In the event COG does not commence drilling the proposed wells on or before \_\_\_\_\_\_, 2011, Ordering Paragraphs (1) and (2) shall be of no further effect, unless COG obtains a time extension from the Division for good cause.
- (7) Upon final plugging and abandonment of the proposed wells, and all other wells drilled on the units pursuant to Division Rule 13.9, the pooled units 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 interests in the units, including unleased mineral interests, who are not parties to an operating agreement governing either or both of the units). After the effective date of this order, COG shall furnish the Division and each known pooled working interest owner in the units an itemized schedule of the estimated costs of drilling, completing and equipping the subject wells.
- (9) Within 30 days from the date the schedule of estimated well costs are furnished, any pooled working interest owner shall have the right to pay its share of estimated well costs to COG 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 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) COG shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs within 90 days following completion of the proposed wells. If no objection to the actual well costs is received by the Division 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.

- (11) Within 60 days following the determination of reasonable well costs, any pooled working interest owner who has paid its share of estimated costs in advance as provided above shall pay to COG its share of the amount that reasonable well costs exceed estimated well costs or shall receive from COG the amount, if any, that the estimated well costs it has paid exceed its share of reasonable well costs.
- (12) COG 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. 200% of the above costs as a charge for the risk involved in drilling the wells.
- (13) COG shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.
- \$6,000 per month while drilling and \$600 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." COG 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) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under this order. Any well costs or charges that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.
- (16) 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.
- (17) COG shall notify the Division in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order.
- (18) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Respectfully submitted,

HOLLAND & HART, LJ.P

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ATTORNEYS FOR COG OPERATING, LLC.

## **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing Proposed Order of COG Operating LLC was served upon the following counsel of record this 25th day of August, 2011 via email to:

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