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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 14331 ORDER NO. R-13156-A

APPLICATION OF XTO ENERGY, INC. FOR COMPULSORY POOLING AND DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

### **ORDER OF THE DIVISION**

## BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 20, 2009, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 24<sup>th</sup> day of September, 2009, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

## **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.
- (2) XTO Energy, Inc. ("Applicant" or "operator") seeks an order pooling all uncommitted interests in the Pictured Cliffs and Chacra formations in the NE/4 of Section 24, Township 29 North, Range 10 West, NMPM, in San Juan County, New Mexico, to form separate, standard 160-acre gas spacing units in the Aztec-Pictured Cliffs Gas Pool (71280), and in the Otero-Chacra Gas Pool (82329).
- (3) The above-described units ("the Units") are to be dedicated to Applicant's Martinez Gas Com. D Well No. 1R (API No. 30-045-34063), ("the well"), which Applicant has drilled, but not completed, at a standard location 1140 feet from the North line and 1580 feet from the East line (Unit B) of Section 24.
- (4) Applicant proposes to complete the well in both the Pictured Cliffs and the Chacra formations, and seeks authorization to downhole comingle production from the two formations within the wellbore.

- (5) Applicant appeared at the hearing through counsel and presented evidence as follows:
  - (a) The well has been drilled to total depth, penetrating both the Pictured Cliffs and the Chacra formations, but has not been completed.
  - (b) Ownership is different in the proposed Pictured Cliffs Unit and the proposed Chacra Unit. Applicant and the parties who have joined with Applicant in the drilling of well own 85% of the working interest in the Pictured Cliffs and 92.1875% of the working interest in the Chacra. The remaining interests are owned by different parties whose interests Applicant seeks to pool in this proceeding.
  - (c) Applicant proposes that the costs of drilling and completing the well (except for costs of fracture treatment) be allocated between the Units based on a formula which allocates to the shallower, Pictured Cliffs, formation a proportion of costs calculated by multiplying total costs by one half times the ratio of the footage depth of the base of the shallower formation to the total depth, and allocating the remaining costs to the deeper, Chacra, formation. Applicant has used this formula for cost allocation in many downhole commingled wells in the San Juan Basin, and numerous other producers have agreed to it.
  - (d) Applicant proposes to allocate proceeds of production between the Units based on the ratio of the average Expected Ultimate Recoveries (EURs) of the respective formations as calculated in other wells completed since 2000 in these formations within a nine-section area including the Units.
  - (e) In the opinion of Applicant's production engineer, this method of allocating production between formations is reasonable. However, the witness was unable to testify that this method of allocation is customary or has been agreed to among owners in any particular instance.
- (6) SG Methane Company, Inc. ("SG"), an owner of a working interest in the proposed Pictured Cliffs unit only, appeared at the hearing through counsel in opposition, but presented no evidence.
- (7) 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.
- (8) Applicant is an owner of an oil and gas working interest within the Units. Applicant had the right to drill the well to a common source of supply within the Units at the well's location.
- (9) There are interest owners in each of the Units that have not agreed to pool their interests. However there are no unlocated owners and no evidence of a title dispute

concerning any interest in either of the Units.

- (10) To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and 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, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas within the Units.
  - (11) Applicant should be designated the operator of the well and of the Units.
- (12) Any pooled working interest owner who does not pay its share of estimated well 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.
- (13) 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-Joint Operations."
- (14) The proposed formula for allocating well costs between the Pictured Cliffs and Chacra formations, as described in Finding Paragraph 5(c), is fair and reasonable, and well costs should be allocated on that basis.
- (15) The Aztec-Pictured Cliffs and Otero-Chacra Pools are pre-approved for downhole commingling pursuant to Division Rule 12.11.E and notice of the intention to commingle was provided to all interest owners.
- (16) The evidence does not sufficiently establish that the proposed formula for allocation of production between the Pictured Cliffs and the Chacra formations, based solely on estimated reserves in other wells, is fair and reasonable. In addition, the large vertical distance between perforations raises the possibility of fracturing and loss of reserves per Division Rule 12.11.A(3). The operator should submit the average reservoir pressures of each pool being commingled and a calculation to predict whether fracturing will occur.
- (17) Accordingly, prior to downhole commingling, the operator should be required to (i) submit the average reservoir pressure encountered in this well within each pool along with a prediction as to whether fracturing could occur and (ii) submit a fixed gas production allocation method based in part on the actual production history of offsetting wells but also based on the performance of the well as it is completed and on recoverable gas volumes calculated from each pool using results from a log analysis of electric logs run on this well.

#### **IT IS THEREFORE ORDERED THAT:**

- (1) Pursuant to the application of XTO Energy, Inc., all uncommitted interests, whatever they may be, in the oil and gas in the Pictured Cliffs and Chacra formations in the NE/4 of Section 24, Township 29 North, Range 10 West, NMPM, in San Juan County, New Mexico, are hereby pooled to form separate standard 160-acre gas spacing units in the Aztec-Pictured Cliffs Gas Pool (71280), and in the Otero-Chacra Gas Pool (82329).
- (2) The above-described units ("the Units") shall be dedicated to Applicant's Martinez Gas Com. D Well No. 1R (API No. 30-045-34063), ("the well") located at a standard location 1140 feet from the North line and 1580 feet from the East line (Unit B) of Section 24.
- (3) Should the well not be completed on or before September 30, 2010, then Ordering Paragraph (1) shall be of no further effect, and the Units created by this Order shall terminate, unless operator appears before the Division Director and obtains an extension of the time for completion of the well for good cause shown by satisfactory evidence.
- (4) Upon final plugging and abandonment of the well and any other well drilled on any of the Units pursuant to Division Rule Part 13, Sections 9 through 11, the pooled units created by this Order shall terminate, unless this order has been amended to authorize further operations.
- (5) XTO Energy, Inc. (OGRID 5380) is hereby designated the operator of the well and of the Units.
- (6) 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 the Units.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Units an itemized schedule of estimated costs of drilling, completing and equipping the well ("well costs").
- (7) Within 30 days from the date the schedule of estimated well costs is furnished, 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 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."

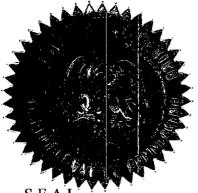
- (8) The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs within 90 days following completion of the well. If no objection to the actual well costs is received by the Division, 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.
- (9) Within 60 days following 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 the operator 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.
- (10) The operator 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 well, 200% of the above costs.
- (11) The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.
- (12) Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$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." The operator 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 are reasonable, attributable to pooled working interest owners.
- (13) 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.
- (14) Should all the parties to this compulsory pooling order reach voluntary agreement subsequent to entry of this order, the compulsory pooling provisions of this order shall thereafter be of no further effect.

(15) The operator of the well and Units shall notify the Division in writing of the subsequent voluntary agreement of all parties subject to the compulsory pooling provisions of this order.

## **IT IS FURTHER ORDERED THAT:**

- (16) Operator is hereby authorized to downhole commingle production from the Aztec-Pictured Cliffs Gas Pool (71280) and the Otero-Chacra Gas Pool (82329) as encountered in the wellbore of its Martinez Gas Com. D Well No. 1R; conditioned, however, upon its compliance with the following provisions. Prior to downhole commingling production, operator shall submit to the Division's engineering bureau in Santa Fe, and to counsel of record for SG, as part of the record in this case:
  - a. The estimated average reservoir pressure within each of these two pools at the location of this well and calculations to show compliance with Division Rule 12.11.A(3).
  - b. A proposed fixed percentage allocation of production. This allocation shall be based on giving appropriate weight to both the empirical ultimate recovery predictions from surrounding wells (as presented at the hearing) and to specific information from this well. The information from this well shall be the calculated recoverable gas from each pool based on log analysis of the electric logs run on this well as well as the performance of each interval during the completion process. The proposed fixed percentage allocation shall be accompanied by an explanation of the calculations used and the relative weight given to each factor.
  - c. Production from the well shall be allocated between commingled formations based on the proposed fixed percentage allocation submitted pursuant to this Ordering Paragraph (16) unless SG files a motion to reopen this case, or the Division orders the case re-opened on its own motion, within 45 days after submission of the information required by this Paragraph. If SG moves to re-open the case, or the Division otherwise re-opens the case within the 45-day period provided, the Division shall determine fair and reasonable allocation percentages after public notice and hearing.
- (17) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director