# 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. 14310 ORDER NO. R- 13147

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, LP FOR AN EXCEPTION TO NMAC 19.15.15.10.C TO ALLOW A SECOND WELL ON A UNIT AND FOR AN UNORTHODOX GAS WELL LOCATION, SAN JUAN COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on June 2, 2009, at Santa Fe, New Mexico, before Examiner William V. Jones.

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

# **FINDS THAT:**

- (1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.
- (2) Devon Energy Production Company, LP (Applicant) seeks permission to re-complete a second well in the Pictured Cliffs formation in an existing spacing unit consisting of the SE/4 of Section 18, Township 31 North, Range 6 West, NMPM, in San Juan County, New Mexico, and to simultaneously dedicate that 160-acre unit to the new well and to the existing Pictured Cliffs on the unit.
- (3) In addition Applicant seeks approval of the unorthodox location of the proposed second Pictured Cliffs well.

- (4) Section 18, Township 31 North, Range 6 West, is included in the Rosa-Pictured Cliffs Gas Pool (Pool Code 96175). Well spacing and density in this pool are governed by statewide Rule 15.10.C, which provides for 160-acre units with one well authorized per unit, such well to be located at least 660 feet from any unit outer boundary. This 160-acre unit is currently dedicated, in the Pictured Cliffs, to Applicant's Northeast Blanco Unit Well No. 241 (API No. 30-045-33495) [the 241 well], located at a standard location 1425 feet from the South line and 870 feet from the East line (Unit I) of Section 18.
- (5) Applicant's Northeast Blanco Unit Well No. 321 (API No. 30-045-31163) [the 321 well], located 835 feet from the South line and 2475 feet from the east line (Unit O) of Section 18, is presently completed in the Mesaverde and Dakota formations. The 321 well's location is standard in those formations, but is unorthodox for the Pictured Cliffs, since it is less than 660 feet from the western unit boundary. Applicant seeks to re-complete the 321 well in the Pictured Cliffs at this unorthodox location and to simultaneously dedicate the SE/4 of Section 18 in the Pictured Cliffs to the 241 well and the 321 well.
- (6) Applicant appeared at the hearing through counsel and presented evidence, including engineering testimony as follows:
  - a. Notice of the proposed simultaneous dedication of two gas wells in an existing Pictured Cliffs gas spacing unit has been provided to all offsetting affected parties. The proposed additional Pictured Cliffs well will encroach only on gas spacing units within the Pictured Cliffs participating area of the Northeast Blanco Unit; therefore notice of the proposed non-standard location is not required.
  - b. Comparison of estimated ultimate recoveries (EURs) of the existing Pictured Cliffs wells in and proximate to Section 18, calculated from decline curves, with volumetric calculations of original gas in place (OGIP), indicates a recovery factor of approximately 40%, which is considered low, and a drainage radius for the existing wells ranging from 75 to 99 acres.
  - c. Two horizontal wells drilled in the Pictured Cliffs in this vicinity have indicated EURs of 1.7 times and 2.8 times, respectively, the average EURs of the offsetting vertical wells, indicating the presence of additional producible gas that is not being produced from the existing vertical wells.
  - d. Applicant wants to acquire additional data in order to determine whether it should undertake a pilot project to demonstrate the appropriateness of increasing well density in the Pictured Cliffs to one well per 80 acres.
  - e. The 321 well is located approximately equidistant from several existing, vertical Pictured Cliffs wells. Re-completion of this existing wellbore in the Pictured Cliffs provides an economical method for testing the potential of

infill wells to produce additional reserves from that formation, and for acquiring data to determine the appropriateness of a more extensive pilot project.

- f. The 321 well will be plugged back and perforated and extensively production tested in the Pictured Cliffs formation. If practical it will then be equipped with dual production equipment to produce from the lower intervals (Dakota/Mesaverde) through tubing and to produce Pictured Cliffs gas through the annulus.
- (7) Williams Production Company, LLC appeared at the hearing through counsel, but did not present any evidence or indicate opposition to the application. No other party entered an appearance or otherwise signified opposition to the application.

#### The Division concludes that:

- (8) Allowing simultaneous dedication of the NE/4 of Section 18 to the 241 well and the 321 well, and approving the unorthodox location of the 321 well as a Pictured Cliffs gas well in the Rosa-Pictured Cliffs Gas Pool will allow production of additional hydrocarbons that would not otherwise be produced, and will likely provide valuable data to determine the appropriate well density for this pool.
- (9) Granting of this application is appropriate since it will prevent waste and will not impair correlative rights.
- (10) In order to assist the Division in assessing the results of the operation that Applicant proposes, Applicant should be required to appear and report results to the Division two years from the date of recompletion of the 321 well.

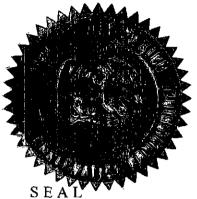
### **IT IS THEREFORE ORDERED THAT:**

- (1) Applicant is hereby authorized to re-complete its Northeast Blanco Unit Well No. 321 (API No. 30-045-31163) [the 321 well], located 835 feet from the South line and 2475 feet from the East line (Unit O) of Section 18, Township 31 North, Range 6 West, San Juan County, New Mexico, in the Pictured Cliffs formation (Rosa-Pictured Cliffs Gas Pool).
- (2) Applicant is authorized to simultaneously dedicate the NE/4 of Section 18 to the 321 well and to its existing Northeast Blanco Unit Well No. 241 (API No. 30-045-33495) [the 241 well], located at a standard location 1425 feet from the South line and 870 feet from the East line (Unit I) of Section 18.
- (3) The unorthodox location of the 321 well in the Rosa-Pictured Cliffs Gas Pool is hereby approved.
- (4) Applicant shall appear at an examiner hearing no sooner than two years and no later than three years after completion of the Pictured Cliffs formation in the 321

well and report preliminary conclusions along with production, pressure, and projected gas recovery data from the 321 well and surrounding Pictured Cliffs wells.

(5) 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