

**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. 15297
ORDER NO. R-13426-A**

**APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR
SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on May 14, 2015, at Santa Fe, New Mexico before Examiner Michael McMillan.

NOW, on this 22nd day of September, 2015, 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 its subject matter.

(2) The Applicant, Devon Energy Production Company, L.P. ("Devon"), seeks to establish special pool rules for the West Jennings-Bone Spring Pool (Pool Code No. 97860) to increase the depth-bracket allowable for oil production to 690 barrels of oil per day per standard 40-acre oil spacing and proration unit.

(3) By Division Order No. R-13426, issued in Case No. 14609, on July 15, 2011, the Division created and defined the West Jennings-Bone Spring Pool (Pool Code No. 97860) for the production of oil from the Bone Spring formation and promulgated Temporary Special Rules allowing a limiting gas-oil ratio of 5000 cubic feet of gas per barrel of oil retroactive to the date of first production from that pool, November 16, 2010. In addition, this order required Devon to present a 1-year plan to the Artesia district office as to how any existing oil or gas overproduction would be handled.

(4) These Temporary Rules expired November 16, 2012 without a petition to make those rules permanent. Therefore, the depth bracket allowable for the West

Jennings-Bone Spring Pool is governed by Division Rule 19.15.20.12 NMAC, which provides a top unit allowable of 230 barrels of oil per day per standard 40-acre oil spacing and proration unit. This pool is also governed by Division Rule 19.15.20.13 NMAC, which provides for a limiting gas-oil ratio of 2000 cubic feet of gas per barrel of oil.

(5) The horizontal limits for this pool currently comprise the following lands in Eddy County, New Mexico:

Township 26 South, Range 31 East, NMPM

Section 10: All
Section 11: All

(6) In addition, the Division's Hobbs district office proposes to expand the pool to include the following acreage:

Township 25 South, Range 31 East, NMPM

Section 36: W/2

Township 26 South, Range 31 East, NMPM

Section 1: NW/4
Section 2: All
Section 4: W/2
Section 8: E/2
Section 9: All
Section 12: All
Section 14: NW/4

(7) All operators of Bone Spring wells within the West Jennings-Bone Spring Pool and within 1 mile of the pool boundaries were notified of this application. No objections were received and no other party entered an appearance in this case.

(8) Devon presented exhibits and testimony showing the following.

(a) Devon operates all wells within this Pool.

(b) There are several Bone Spring targets for horizontal drilling at different depths within each spacing unit within a distinct project area. Devon's geologist showed a clear separation exists between the separate Bone Spring horizontal drilling targets. Devon's engineer indicated the completion of the separate vertical targets do not appear to interfere with each other. Devon plans to optimize costs by consecutively or simultaneously drilling and completing the vertical targets.

- (c) As additional wells are added, the initial GOR and initial production from the new wells remain similar and therefore show that reservoir energy has not been significantly affected by previous production.
- (d) To determine the optimum number of wells to drill per Section, Devon's engineer set up a reservoir model and history matched the pressures. From this model, various scenarios were projected indicating that a drilling density of approximately 6 horizontal wells per Section (rather than the normally drilled 4 wells per Section) may be optimum in recovering more oil with acceptable economic parameters. This assumes the proposed increase in the depth bracket allowable.
- (e) The reservoir model under history match indicated that the proposed increase in allowable and increase in well density would not result in decreased recovery or harm to the reservoir.
- (f) If additional allowable is not granted, the development of this reservoir would be delayed and result in additional costs, thereby decreasing the number of horizontal wells ultimately drilled in this Pool.

The Division concludes that:

(9) Devon has shown that an increase in the depth bracket allowable to 690 barrels of oil per day per standard 40-acre spacing and proration unit is necessary for continued, rapid development of this pool without causing reservoir damage. The drilling of horizontal wells at multiple depths within the same project area, the drilling of more than 4 wells per Section, and the simultaneous production of those wells is necessary in order to optimize drilling and completion costs and to prevent waste of oil reserves that would not otherwise be produced.

(10) The testimony by Devon in the previous hearing in Case No. 14609 indicated that a limiting gas-oil ratio of over 2000 cubic feet of gas per barrel of oil was needed. In this case, Devon did not ask for an increase in the limiting gas-oil ratio and further testified that producing oil at a higher rate does not result in excessive production of gas. The proposed pool rules should be made temporary for a period of two years, at which time the operator within this pool should appear at hearing to show cause as to why the temporary rules should not be rescinded.

(11) Devon did not ask for the special depth bracket allowable to be made retroactive. The effective date of this order should be the first day of the month following entry of this order.

(12) Devon showed production plots indicating that wells have been overproduced in this Pool. Those plots further indicate that this overproduction has likely been balanced by underproduction. However, Devon should supply the Division's

Artesia office with a tabular listing of past production showing cumulative over or underproduction and work with that office to ensure any overproduction has been balanced by underproduction.

(13) Increasing the depth-bracket allowable for the West Jennings-Bone Spring Pool will enable the operators in the pool to efficiently produce the hydrocarbons within this reservoir, will not result in the excessive waste of reservoir energy, should not reduce the ultimate recovery of oil from this reservoir, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Devon Energy Production Company, L.P. ("Devon") to increase the depth-bracket allowable for the West Jennings-Bone Spring Pool to 690 barrels of oil per day per standard 40-acre spacing and proration unit is hereby approved.

(2) Temporary Special Pool Rules for the West Jennings-Bone Spring Pool (Pool Code No. 97860) are hereby established as follows:

**SPECIAL RULES FOR THE
WEST JENNINGS-BONE SPRING POOL**

Rule 1: Each well completed or recompleted in the West Jennings-Bone Spring Pool (97860) or within 1 mile thereof and not nearer to or within the limits of another Bone Spring oil pool, shall be produced in accordance with the Special Rules hereinafter set forth.

Rule 2: Effective October 1, 2015, the allowable for a standard 40-acre oil spacing and proration unit shall be 690 barrels of oil per day.

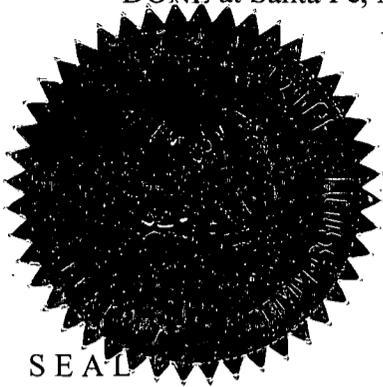
Rule 3: All other rules shall conform to the Division's statewide rules.

(3) These Temporary Special Rules shall expire on October 1, 2017 unless an operator from this pool has presented a case before the Division to make these rules permanent. Any application to make these rules permanent shall also include sufficient reservoir engineering and production data showing that waste will not occur by permanent adoption of these rules.

(4) Devon shall supply the Division's Artesia office with tabular oil and gas monthly production data for each well in this pool to show whether there is remaining cumulative overproduction. If overproduction still exists, it shall present a one year plan to the Artesia district office showing a schedule for making up overproduction.

(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

David R. Catanach

DAVID R. CATANACH
Director