

**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:**

**APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR A  
SPECIAL PROJECT ALLOWABLE, LEA COUNTY, NEW MEXICO.**

**CASE NO. 15198  
ORDER NO. R-13925**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on September 18, 2014, at Santa Fe, New Mexico, before Examiner Richard I. Ezeanyim.

NOW, on this 4<sup>th</sup> day of November, 2014, 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) Devon Energy Production Company, L.P. ("Devon", "Applicant" or "Operator"), seeks approval of a special project allowable in the Bone Spring formation in all of Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico.

(3) The Applicant proposes to develop Section 32 in the second Bone Spring Sand with initially six (6) stand-up horizontal wells. The wells will be completed in the middle of the Bone Spring formation at true vertical depths (TVD) between 10,500 to 10,700 feet subsurface. The Applicant seeks to increase the Depth Bracket allowable from 320 to 690 barrels of oil per day per 40-acre oil spacing and proration unit for this special project.

(4) COG Operating, LLC, appeared at the hearing through counsel and did not oppose the granting of this application.

The Applicant appeared at the hearing through counsel and presented the following testimony:

(5) The Applicant is seeking the approval of a special project allowable in the Bone Spring formation in all of Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico.

(6) The Bone Spring formation in Section 32 is a wildcat acreage, and is not within one mile of any Bone Spring Pool created by the Division. Accordingly, the acreage in Section 32 is subject to the Division's statewide rules, including well spacing and proration unit requirements and Depth Bracket allowable.

(7) The Applicant plans to develop Section 32 in the Second Bone Spring Sand with initially six (6) stand-up horizontal wells. Two (2) wells will be drilled from one pad in order to minimize surface disturbance.

(8) Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico, is undeveloped acreage. The purpose of this development plan is to gather data in order to determine the optimum well density in the Bone Spring formation.

(9) The production from the wells recently drilled by the Applicant near Section 32 demonstrates that production from the wells to be drilled in Section 32 will exceed the Depth Bracket allowable for any 160-acre project area, especially if two or more horizontal wells are drilled on this project area.

(10) The Applicant requests that the Depth Bracket allowable be increased to 690 barrels of oil per day to enable the Applicant to conduct this special project.

(11) The drive mechanism of the reservoir in Section 32 is solution gas drive. In this type of reservoir, to curtail production in order to comply with the current Depth Bracket allowable will damage the well with resultant loss of reserves, and the Applicant will not be able to accumulate enough data to determine the optimum well density.

(12) There is no evidence of reservoir damage or waste as a result of increasing the allowable to 690 barrels of oil per day.

(13) Notice of this application was provided to all the operators within the pool and within one mile of the pool.

(14) Except COG Operating, LLC, which appeared at the hearing through counsel but did not oppose the granting of this application, no other operator appeared at the hearing to oppose this application.

(15) The approval of this application is in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

**The Division concludes as follows:**

(16) In accordance with Division Rule 19.15.15.8.A(2) NMAC, the six proposed wells are wildcat wells, because they will be drilled on a spacing unit which is a distance of one or more miles from the outer boundary of any defined pool that has produced oil or gas from the formation to which the wells are projected to be drilled.

(17) The application submitted by the Applicant requests that the Depth Bracket allowable be increased from 230 to 690 barrels of oil per day for a 40-acre spacing and proration unit based on true vertical depth (TVD) between 8,000 to 8,999 feet. However, at the hearing, testimony was provided by the Applicant that the wells will be landed at true vertical depths between 10,500 to 10,700 feet. The Depth Bracket allowable between these depths is 320 barrels of oil per day per 40-acre spacing and proration unit. The Applicant is therefore requesting that the Depth Bracket allowable be increased from 320 to 690 barrels of oil per day.

(18) The isopach map of the Second Bone Spring Sand in this area with a net thickness of approximately 131 feet indicates that the well orientation could be North to South or East to West. The Applicant conducted a microseismic survey of the area and determined that a North to South or South to North well orientation will be more appropriate to produce the hydrocarbons in this area.

(19) Using data from offset wells adjoining Section 32, the Applicant conducted Rate Transient Analysis (RTA) and Sensitivity Analysis, and determined that the maximum Estimated Ultimate Recovery (EUR) from Section 32 will be achieved with six wells. The reservoir data used to conduct these analyses were reviewed by the Division and found to be adequate, because they were obtained from core samples, logs, Diagnostic Fracture Injection Test (DFIT), and Pressure-Volume-Temperature analysis.

(20) The Applicant also conducted a Net Present Value (NPV) analysis and determined that, with an optimum well density of six wells per section at a discount rate of 10%, total reserves could be increased from 30% to 40%. The 10% discount rate is a typical average rate used in the oil and gas industry for property evaluation and is appropriate for this application.

(21) In accordance with Division Rule 19.15.16.15.D NMAC, there is no limit on the number of horizontal wells that can be drilled on a given spacing and proration unit or project area.

(22) The Applicant, using data from the offset wells adjoining Section 32, has calculated that the maximum EUR will be achieved with six wells. However, in practice the actual optimum number of wells to develop a given project area, such as Section 32 in this case, will be determined if the Applicant is allowed to conduct this special project to collect actual reservoir data for analysis.

(23) The Oil Conservation Division is obligated to prevent waste and protect correlative rights and, therefore, the Applicant should be allowed to conduct this special project especially if total reserves could be increased to 40% in this solution gas drive reservoir.

(24) The reservoir produces by solution gas drive, or dissolved gas drive mechanism. There is no primary or pre-existing gas cap, and upon depletion, there is no secondary or developed gas cap. The only available predominant energy that moves the oil to the wellbore is the expansion of the solution gas.

(25) In a solution gas drive reservoir of this nature with no initial free gas present, no water drive or gravity drainage, the rate of production is independent of estimated ultimate recovery. The reservoir is not damaged or harmed by high production rates; therefore, waste is not induced. Correlative rights are protected by the current setback requirements.

(26) This application should be approved in order to prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Devon Energy Production Company, L.P. (**OGRID No. 6137**), for a special project allowable in the Bone Spring formation in all of Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby **approved**.

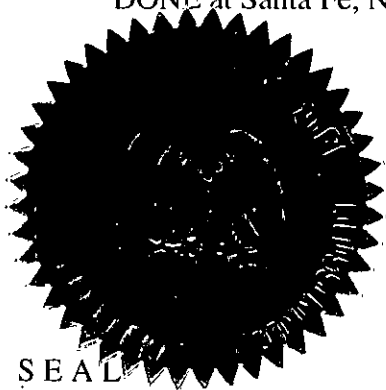
(2) The Depth Bracket allowable for a 40-acre oil spacing and proration unit in Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico, shall be increased from 320 to 690 barrels of oil per day, for this special project in the Second Bone Spring Sand.

(3) Before commencing this special project, the Applicant shall contact the Division's District I Office in Hobbs to designate a pool for the six wells in Section 32, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico.

(4) The Applicant shall, at the conclusion of this special project, report the findings and results of the project to the Santa Fe Office of the Oil Conservation Division for evaluation. After evaluating the data submitted by the Applicant, the Division shall continue the Depth Bracket allowable granted herein, or return the allowable to statewide rules.

(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

A handwritten signature in cursive script, appearing to read "Jami Bailey".

JAMI BAILEY  
Director