

**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. 14308
ORDER NO. R-13124**

**APPLICATION OF RSC RESOURCES
LIMITED PARTNERSHIP TO ALLOW TWO
OPERATORS ON A WELL UNIT, EDDY
COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 16, 2009, at Santa Fe, New Mexico, before Examiners David K. Brooks, Richard Ezeanyim and Terry Warnell.

NOW, on this 11th day of May, 2009, the Division Director, having considered the testimony, the record and the recommendations of the Examiners,

FINDS THAT:

- (1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.
- (2) RSC Resources Limited Partnership (OGRID 245801) ("Applicant") seeks permission to drill a horizontal well across four contiguous 40-acre oil spacing units, on one of which is located an existing vertical well operated by a different operator and completed in the same formation.
- (3) Applicant proposes to drill its Lucky Wolf 30 Federal Com. Well No. 2H ("the Lucky Wolf well") from a surface location 2310 feet from the South line and 100 feet from the West line (Unit L) of Section 30, Township 16 South, Range 28 East, NMPM, in Eddy County, New Mexico, to a standard point of penetration of the Wolfcamp formation 2295 feet from the South line and 330 feet from the West line (Unit L) of said section; thence laterally in the Wolfcamp formation to a standard terminus 1980 feet from the South line and 330 feet from the East line (Unit I) of said section.

(4) Applicant proposes to dedicate the Lucky Wolf well to a 162.74-acre project area consisting of Lot 3, the NE/4 SW/4 and the N/2 SE/4 (N/2 S/2 equivalent) of Section 30 ("the proposed project area"). The project area will comprise four contiguous quarter-quarter sections, each containing 40 acres, more or less, in the Dog Canyon-Wolfcamp Pool (17970). Spacing in this pool is governed by statewide Rule 15.9.A, which provides for standard 40-acre units, each comprising a governmental quarter-quarter section. However, in Case No. 14277, Applicant has requested the Division to form a non-standard spacing unit consisting of this entire proposed project area, and compulsory pool that unit.

(5) The Crow Flats Fed Com. Well No. 1 (API No. 30-015-23386) ("the Crow Flats well"), operated by Three Span Oil & Gas Inc. (OGRID 184905) ("Three Span"), is located within the proposed project area, 1980 feet from the South and West lines (Unit K) of Section 30, Township 16 South, Range 28 East. The Crow Flats well is completed in the Dog Canyon-Wolfcamp Pool, and a standard 40-acre unit consisting of the NE/4 SW/4 of Section 30 is dedicated to that well. Thus the proposed non-standard unit and project area for the Lucky Wolf well includes the existing unit for the Crow Flats well.

(6) Division Rule 15.12 allows different operators to drill wells within a single spacing unit, but requires that an operator commencing a well it intends to complete in a unit dedicated to another operator's existing well first give notice to that operator, who then has an opportunity to protest the drilling of the proposed well. Applicant gave notice to Three Span pursuant to this provision, and Three Span has protested Applicant's proposal to drill the Lucky Wolf well.

(7) Applicant appeared at the hearing through counsel and presented land and engineering testimony in support of its application.

(8) Applicant's land witness testified that Applicant and other working interest owners who have either joined with Applicant or that Applicant seeks to force pool in Case No. 14277 own the entire working interest in the proposed project area, including the NE/4 SW/4 of Section 30, save and except for the wellbore of the Crow Flats well. Three Span's ownership in the project area in the Wolfcamp formation is limited to the wellbore in the Crow Flats well only.

(9) Applicant's engineering witness testified that:

(a) Horizontal wells are the preferred way to develop the Wolfcamp formation in this area. Vertical wells will not produce reserves from this reservoir economically.

(b) Applicant will direct the Lucky Wolf well so that the horizontal shaft will be no more than 430 feet from the north line of the project area throughout the NE/4 SW/4 of Section 30, thus passing at least 230 feet north of the surface location of the Crow Flats well. Horizontal drilling technology is sufficiently precise to insure that this distance is maintained.

(c) Drilling horizontal wells in close proximity to vertical wells (as close as 100 feet) is a common practice in this area. The witness knew of no instance where a horizontal well damaged a vertical well.

(d) The maximum deviation from vertical indicated by the inclination survey filed for the Crow Flats well is 100 feet. Due to formation dip, this well would have most likely deviated to the west, and not to the north. However, even if it deviated 100 feet to the north, it would still be at least 130 feet from the nearest point in the wellbore of the proposed Lucky Wolf well.

(e) The Crow Flats well, which is only producing four to five barrels of oil per day, will not economically produce the remaining estimated 27,000 barrels of recoverable oil underlying the NE/4 SW/4 of Section 30.

(f) The maximum production expected from the Lucky Wolf well is in the range of 300 barrels of oil per day. The depth bracket allowable for the proposed project area is in excess of 400 barrels per day. Accordingly, the combined production from the Lucky Wolf Well and the Crow Flats well is unlikely to exceed the applicable unit allowable.

(10) Three Span appeared at the hearing through counsel and presented engineering testimony as follows:

(a) Three Span objects to the drilling of the Lucky Wolf well because of concerns about physical damage to the wellbore of the Crow Flats well and impairment of Three Span's correlative rights.

(b) During drilling and completion, the Lucky Wolf well will be in an overbalanced condition, and the consequent pressure differential could harm the Crow Flats well. Also, Wolfcamp wells in this area are generally completed with multi-stage fracture treatments that could physically damage a nearby wellbore.

(c) The Crow Flats well is currently producing approximately six barrels of oil per day. Its estimated drainage radius is approximately 57 acres, an area larger than the 40-acre unit presently dedicated to the well, and it will produce the remaining economically recoverable reserves underlying its 40-acre unit (which the Three Span witness estimated at 9,000 barrels of oil) over a period of approximately 50 years.

(11) In rebuttal, Applicant's engineering witness testified that the fracture treatments it proposes to use are designed to stay within 100-foot intervals, and that resulting fractures would project vertically, not horizontally toward the Crow Flats well. He concluded that damage to the Crow Flats well from fracture treatment of the Lucky Wolf well would be unlikely.

The Division concludes that:

(12) Although Three Span's witness articulated concerns about possible damage to the Crow Flats wellbore that could result from drilling and completion of the Lucky Wolf well, he cited no studies or literature indicating a probability of such damage, nor did he present any evidence of any situation where such damage had occurred. Accordingly, the testimony of Applicant's witness that horizontal wells have been frequently drilled in close proximity to vertical wells in this immediate area without causing damage is more convincing, and the Division concludes that Three Span has not demonstrated that such damage is reasonably probable.

(13) The Division further concludes that the Lucky Wolf well will not impair any correlative rights that Three Span may have.

(14) "Correlative rights" are defined in the New Mexico Oil and Gas Act as:

... the opportunity afforded ... to the owner of each property within the pool to produce without waste his just and equitable share of the oil or gas or both in the pool, being an amount ... substantially in proportion that the quantity of recoverable oil or gas or both under the property bears to the total recoverable oil or gas or both in the pool ... [NMSA 1978 Section 70-2-33.H]

(15) The Division has a statutory duty to protect correlative rights, and therefore necessarily has jurisdiction to determine what the correlative rights appertaining to a particular property are. Neither party has cited any New Mexico decision construing the definition of correlative rights as applied to a wellbore interest, and the Division is not aware of any such decision.

(16) Under the Oil and Gas Act, a person's correlative right to the oil and gas in a pool is determined by the quantity of oil and gas originally underlying the land such person owns, and not by the ability of any particular well to produce that quantity. A wellbore assignment does not define any area (beyond possibly the radius of the wellbore itself) to which the Division can look to determine the "quantity of recoverable oil or gas or both under the property." It would not be reasonable to define the correlative right of the owner of a wellbore interest as including all recoverable oil or gas underlying the spacing unit dedicated to the well since that interpretation would deny any correlative rights to the owners of the oil and gas in the rest of the spacing unit. Thus the numerator in the statutory formula for determining a party's correlative rights (the amount of recoverable oil or gas "under the property") cannot practicably be determined for an interest defined by a wellbore assignment. Furthermore, in this case, no party offered any evidence to quantify the denominator in the statutory formula (the amount of recoverable oil or gas in the pool). See Continental Oil Company v. Oil Conservation Commission, 70 N.M. 310, 319, 373 P.2d 809 (Sup. Ct. 1962).

(17) The applicable spacing rule, Division Rule 15.9.A, allows up to four wells to be completed within a 40-acre oil unit. There is presently only one well, the Crow Flats well, located in the NE/4 SW/4 of Section 30 and completed in the Dog Canyon-

Wolfcamp Pool. Thus Three Span has the burden of proof to demonstrate in this case that the completion of an authorized second well in this quarter-quarter section will impair its correlative rights. It has not done so.

(18) In Order No. R-13121, issued this day in Case No. 14277, the Division has formed a non-standard oil spacing unit in the Dog Canyon-Wolfcamp Pool containing 162.74 acres and comprising the entire N/2 S/2 equivalent of Section 30-16S-28E. This non-standard spacing unit includes the 40-acre spacing unit presently dedicated to the Crow Flats well, but expressly *excludes* the Crow Flats well.

(19) For proration purposes, however, the Crow Flats well should be assigned to the non-standard, N/2 S/2 unit. Otherwise, the Crow Flats well will be left with no acreage assigned to it and, accordingly, no allowable.

(20) The Division has authority to establish separate spacing units and proration units, and the two need not coincide. *Rutter and Wilbanks Corporation v. Oil Conservation Commission*, 87 N.M. 286, 288-89, 532 P.2d 582 (Sup. Ct. 1975).

(21) Accordingly the Division should establish a non-standard, 162.74-acre oil proration unit in the Dog Canyon-Wolfcamp Pool, coinciding with the 162.74-acre non-standard spacing unit established by Order No. R-13121, but expressly *including* the Crow Flats well.

IT IS THEREFORE ORDERED THAT:

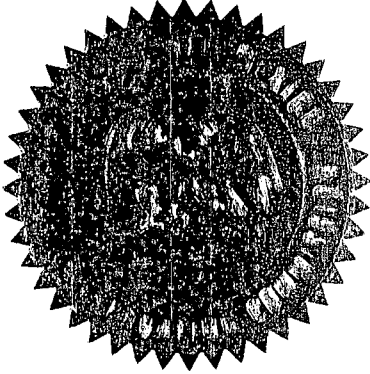
(1) The application of RSC Resources Limited Partnership (OGRID 245801) for an order authorizing it, as operator, to drill and complete the proposed Lucky Wolf well as a second oil well in the Wolfcamp formation in a project area including the NE/4 SW/4 of Section 30, Township 16 South, Range 28 East, NMPM, in Eddy County, New Mexico, is hereby granted.

(2) There is hereby established a non-standard 162.74-acre, more or less, oil proration unit in the Dog Canyon-Wolfcamp Pool, comprising Lot 3, the NE/4 SW/4 and the N/2 SE/4 (N/2 S/2 equivalent) of Section 30, Township 16 South, Range 28 East, NMPM, in Eddy County, New Mexico, *including* the Crow Flats well. The proration unit so established will be dedicated to the Crow Flats well and to the proposed Lucky Wolf well.

(3) Unless and until the parties otherwise agree, or the Division otherwise orders, the allowable for the proration unit established by Ordering Paragraph (2) shall be allocated between the respective operators as provided in Rule 15.12.A.

(4) 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.



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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read "Mark E. Fesmire".

2 MARK E. FESMIRE, P.E.
Director