



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0289965

**THE APPLICATION OF CIMAREX ENERGY COMPANY TO AMEND FIELD RULES
FOR THE FORD, WEST (WOLFCAMP) FIELD, CULBERSON COUNTY, TEXAS**

OIL AND GAS DOCKET NO. 08-0290320

**THE APPLICATION OF CONOCOPHILLIPS COMPANY TO AMEND FIELD RULES
FOR THE FORD, WEST (WOLFCAMP) FIELD, CULBERSON COUNTY, TEXAS**

HEARD BY: Paul Dubois – Technical Examiner
Terry Johnson – Hearings Examiner

HEARING DATE: October 20, 2014

CONFERENCE DATE: January 27, 2015

APPEARANCES:

Michael McElroy
Dave Rittersbacher
Rita Behm

Jamie Nielson
Greg Cloud
Michelle Papso

REPRESENTING:

Cimarex Energy Company

ConocoPhillips Company

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Cimarex Energy Company (Cimarex) and ConocoPhillips Company (ConocoPhillips), each on their own initiative, have applied to the Commission to amend the field rules for the Ford, West (Wolfcamp) Field in Culberson County, Texas. On the

request of the Applicants, their applications were heard in a consolidated hearing on October 20, 2014. All operators in the field were notified of both applications, and there were no protests at the time of the hearing. The examiners recommend the field rules be amended as further described herein, and that a consolidated final order be issued by the Commission.

Cimarex requested amendments to the existing provisions in the field rules for horizontal wells, including: (1) 200-foot spacing for first and last take points; (2) adoption of a stacked lateral rule; and (3) adoption of a 50-foot box rule.

ConocoPhillips' requested amendments include: (1) eliminate minimum between well spacing requirements; (2) 100-foot minimum lease line spacing for first and last take points; (3) 467-foot minimum perpendicular spacing between take points and lease lines; (4) adoption of a 50-foot box rule; (5) optional filing of proration plats; (6) acreage assignments using Form P-15; (7) elimination of maximum diagonal requirements; and (9) adoption of a stacked lateral rule.

In its initial application, ConocoPhillips sought to remove the minimum between well spacing requirement and to allow for 100-foot spacing for first and last take points. At the hearing, ConocoPhillips revised its request, agreeing with Cimarex on 200-foot spacing for first and last take points. Instead of removing the minimum between well spacing requirement, at the hearing ConocoPhillips requested that the minimum between well spacing requirement be retained but that a provision for reduced notice requirements for exceptions to Statewide Rule 37 be adopted. The Examiners inquired whether all potentially affected parties under Statewide Rule 37 were aware of the proposal to reduce the notice provisions in the field rules. When counsel for ConocoPhillips indicated that the potentially affected parties had not been noticed, the Examiners inquired whether Conoco would consider a negative recommendation on this matter to be adverse. By letter dated October 22, 2014, counsel for ConocoPhillips notified the examiners that such a recommendation would not be considered adverse.

DISCUSSION OF EVIDENCE

The Ford, West (Wolfcamp) Field is located south of the Texas-New Mexico state line in Culberson and Reeves Counties, Texas. Most of the field development—about 90 percent—has thus far been in northeast Culberson County with some expansion into northern Reeves County. At least two wells have been permitted in western Loving County, also.

The Ford, West (Wolfcamp) Field includes a 2,407 foot thick correlative interval. Within this interval the Wolfcamp B, C, D and E zones include a gross thickness of more than 800 feet, within which Cimarex has identified at least two zones (C and D) currently targeted for development. These two target landing zones have a vertical separation of

about 200 feet; completing separate wells to fully develop both zones requires spacing and density exceptions. As an alternative, stacked lateral wells and a 50-foot box rule are necessary to fully develop both zones and any future zones targeted for development.¹ ConocoPhillips is also targeting multiple intervals within the field for stacked lateral wells. Cimarex request that a 350-foot stacked lateral definition area be established to allow for some drift and variation when drilling the horizontal drainholes.

Wells in the field are completed with hydraulic fracture stimulation. The natural open fractures in the Wolfcamp Formation exhibit a dominant fracture direction of North 70° East. There are many more mineralized fractures, but these also exhibit a primary orientation of about North 70° East. The drilling induced fractures have a slightly different orientation of about North 80° East. Therefore, the wells are drilled in a north-south orientation to take advantage of the induced fracture orientation.

Cimarex conducted a study of horizontal well orientation with two wells oriented in an east-west direction and four wells oriented north-south to evaluate variations in well completion and reservoir potential with respect to compass orientation. The wells selected for this study were chosen to be all in the same part of the field area and were completed with similar lateral lengths and number of stages. The wells oriented north-south accepted more fracturing fluid and proppant than the east-west wells. In addition, the wells oriented north-south produced significantly more oil and gas than the wells oriented east-west.

The current field rules provide for 467-foot lease line spacing. Reducing the spacing for first and last take points to 200 feet will allow for an additional 534 feet of productive drainhole, preventing waste of hydrocarbons. Cimarex's expert geological witness, Mr. Dave Rittersbacher, testified that the 200-foot spacing for first and last take points would likely not result in fractures crossing the lease lines to the north or south, as the dominant fracture direction is an east-west orientation. Therefore, a perpendicular take point to lease line minimum spacing provision of 467 feet is appropriate also.

An exception to Statewide Rule 37 requires that all offset operators and unleased mineral owners be notified of a drilling permit application requiring such an exception. Most of ConocoPhillips' and Cimarex's leases are full sections—640 acres—which would therefore require notice to persons in an eight square-mile area. To reduce the burden of identifying all parties requiring notice in such a large area, ConocoPhillips requested a streamlined process requiring notice only to those operators and unleased mineral interest owners within a reduced distance. After the hearing, ConocoPhillips withdrew this request.

Several other amendments sought by the parties are generally regarded as standard field rules in fields experiencing horizontal development and hydraulic fracture stimulation, including optional filing of proration plats, using Form P-15 for acreage

¹ Cimarex Exhibit No. 3.

assignment, and the elimination of maximum diagonal requirements.

FINDINGS OF FACT

1. Notice of this hearing was sent to all persons entitled to notice.
2. The Ford, West (Wolfcamp) Field is located south of the Texas-New Mexico state line in Culberson and Reeves Counties, Texas.
3. The Ford, West (Wolfcamp) Field includes a 2,407 foot thick correlative interval.
 - a. Within this interval there are several zones targeted for horizontal development.
 - b. Stacked lateral wells are necessary to efficiently develop the field.
 - c. A 50-foot box rule will provide spacing flexibility when drilling long laterals.
4. Wells drilled in a north-south orientation will most effectively take advantage of the induced fracture orientation, which is oriented east-west.
 - a. The wells oriented north-south accepted more fracturing fluid and proppant than the east-west wells.
 - b. The wells oriented north-south produced significantly more oil and gas than the wells oriented east-west.
5. Reducing the spacing for first and last take points to 200 feet will allow for an additional 534 feet of productive drainhole, preventing waste of hydrocarbons.
6. The 200-foot spacing for first and last take points will not result in fractures crossing the lease lines to the north or south, as the dominant fracture direction is an east-west orientation.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051

2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.45
3. The proposed field rules will prevent waste, protect correlative rights, and satisfy statutory requirements.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend the applications of Cimarex and ConocoPhillips be approved and that the field rules the Ford, West (Wolfcamp) Field be amended as set out in the attached proposed Final Order.

Respectfully submitted,



Paul Dubois
Technical Examiner



Terry Johnson
Hearings Examiner