

**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. 14145
ORDER NO. R-13040**

**APPLICATION OF FASKEN OIL AND RANCH,
LTD. FOR A COMPLIANCE ORDER REQUIRING
CIMAREX ENERGY COMPANY OF COLORADO TO
COMPLY WITH THE DIVISION'S OIL PRORATION
RULES FOR THE APACHE RIDGE-BONE SPRING
POOL, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 26, 2008, at Santa Fe, New Mexico, before Examiner Richard Ezeanyim.

NOW, on this 5th day of November, 2008, 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 of the subject matter.

(2) Fasken Oil and Ranch, Ltd. ("applicant" or "Fasken") seeks an order requiring Cimarex Energy Company of Colorado ("Cimarex") to comply with the Division's oil proration rules for the Apache Ridge-Bone Spring Pool (the "Pool"), Lea County, New Mexico with respect to the following four wells.

<u>Well Name</u>	<u>Location</u>	<u>Compl. Date</u>	<u>Cum. Oil</u>	<u>Overproduction</u>
Pennzoil B 36 St. 7	A-36-19S-33E	3/08	24,827	13,317
Pennzoil 36 St. 1	I-36-19S-33E	3/97	534,682	5,692
Pennzoil B 36 St. 2	J-36-19S-33E	7/07	88,118	19,440
Mescalero 30 Fed. 1	P-30-19S-34E	8/85	339,144	5,891

(3) Fasken also seeks an order requiring Cimarex to shut-in the above referenced wells because of their overproduction from the Pool.

(4) The Pool was created by Division Order No. R-8075, dated November 8, 1985, and currently covers the following lands:

Township 19 South, Range 33 East, N.M.P.M.

Section 36: SE/4

Township 19 South, Range 34 East, N.M.P.M.

Section 30: SE/4

Section 31: W/2 and NE/4

Section 32: NW/4

(5) The discovery well for the Pool is the Mescalero 30 Fed. Well No. 1 (API No. 30-025-29266), located 510 feet from the South line and 990 feet from the East line of Section 30, Township 19 South, Range 34 East, N.M.P.M. It is an oil well with perforations in the Bone Spring formation at 9,376-9,604 feet subsurface. Under Division Rule 104, spacing in the Pool is 40 acres, with wells to be located no closer than 330 feet to a quarter-quarter section line. Under Division Rules 505 and 506, the Pool has a depth bracket allowable of 275 barrels of oil per day with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil produced.

(6) Cimarex appeared through legal counsel in this case in opposition to the relief sought by applicant. This case was consolidated for the purpose of testimony with Case No. 14124 entitled "*Application of Cimarex Energy Company of Colorado for special rules and regulations for the Apache Ridge-Bone Spring Pool.*" However, separate orders will be issued in each case.

(7) The witness for Fasken presented the following testimony.

(a) The Pennzoil 36 State Well No. 1 was recompleted to the Bone Spring formation by Mallon Oil Company in 1997 at a location 1980 feet from the South line and 660 feet from the East line of Section 36, Township 19 South, Range 33 East, N.M.P.M., Lea County, New Mexico. Its total cumulative production from the Bone Spring formation to date is approximately 536,000 barrels of oil. This well overproduced its allowable by 5,692 barrels of oil.

(b) When the Pennzoil 36 State Well No. 1 was completed, the producing interval was incorrectly reported by Mallon Oil, Cimarex's predecessor in title, to the Oil Conservation Division (Division) as being from a Bone Spring interval that is not present in the offsetting Fasken acreage. Fasken did not discover the overproduced status of this well until it received data subpoenaed from Cimarex in this case. Since the reported producing

interval in the Pennzoil 36 State Well No. 1 is not present in the Fasken tract, no Bone Spring well was drilled by Fasken to offset drainage from the Fasken tract.

- (c) The Mescalero 30 Federal Well No. 1 was drilled by Mallon Oil Company to the Bone Spring formation in 1985 at a location 510 feet from the South line and 990 feet from the East line of Section 30, Township 19 South, Range 34 East, N.M.P.M. The Mescalero 30 Federal Well No. 1 was originally completed in the Bone Spring formation in 1985 and in different Bone Spring intervals in 1998. Its total cumulative production from the Bone Spring formation is more than 296,000 barrels of oil. This well overproduced its allowable by 5,891 barrels of oil.
 - (d) In 2007, Cimarex drilled its Pennzoil "B" 36 State Well No. 2 in the SE/4 of Section 36 and completed the well in the Bone Spring formation. The well produced at rates in excess of 500 barrels per day and has overproduced its allowable by 19,440 barrels of oil.
 - (e) The Pennzoil "B" 36 State Well No. 7 was drilled in February 2008 as a direct offset to the Fasken acreage at a location 840 feet from the North line and 660 feet from the East line of Section 36, Township 19 South, Range 33 East, N.M.P.M. This well first produced in March 2008 at rates as high as 800 barrels of oil per day. This well has overproduced its allowable by 13,317 barrels of oil.
 - (f) Material balance decline curve analysis shows that wells in this pool are draining in excess of 160 acres and the Pennzoil 36 State Well No. 1 has drained in excess of 640 acres. The Dolomite zones in the Apache Ridge-Bone Spring Pool are capable of efficiently draining over 160 acres per well.
 - (g) The perforated interval in the Pennzoil 36 State Well No. 1 was misreported to the Division, and Fasken did not discover the error and did not drill a well to offset the drainage from the Pennzoil 36 State Well No. 1.
 - (h) The failure of Cimarex to report the correct producing interval in the Pennzoil 36 State Well No. 1 allowed owners of Section 36 to gain an advantage on offsetting acreage in violation of the Division rules.
- (8) Fasken's witness testified that Cimarex knew that it was overproducing the allowable in the Pennzoil 36 State Well No. 1 and other wells, but failed to make up the over-production from these wells. It (Cimarex) has no plans for adjustment to make up the over-production and it does not intend to propose a plan of adjustment until the

Division tells it to do so. Curtailing production to current allowable levels does not eliminate the overproduction that has occurred over the years, and Cimarex should not be allowed to continue to produce illegal oil under the rules of the Division.

(9) Fasken's counsel argued that the four wells should immediately be shut-in, and the overproduction be made up in a timely manner.

(10) Cimarex Energy Company of Colorado appeared through legal counsel and argued that the wells should not be shut-in because of the inherent danger in losing the well altogether.

(11) The Cimarex witness testified that the claim by Fasken that it did not know of development in the Pool until this application was filed is unfounded because public records show the following:

(i) The Pool was discovered in 1985 by the Mescalero 30 Fed. Well No. 1, which has since produced over 300,000 barrels of oil. The completion report was filed in September 1985, and all production from this well was reported.

(ii) The Pennzoil 36 St. Well No. 1 was completed in 1997 and has since produced over 500,000 barrels of oil. All production from this well was reported.

(iii) The first well which Cimarex drilled in the Pool, the Pennzoil B 36 State No. 1, which had initial oil rate of over 180 BOPD, had a completion report filed in January 2007.

(12) The Cimarex witness also offered the following testimony.

(a) Two of the overproduced wells, the Pennzoil 36 St. Well No. 1 and the Mescalero 30 Fed. Well No. 1, were drilled by Cimarex's predecessor in title, and were not overproduced by Cimarex. Their current producing rates are approximately 15 and 50 barrels of oil per day (BOPD), respectively.

(b) The Pennzoil B 36 State Well No. 2, in Unit J of Section 36, is internal to Cimarex's lease, does not adjoin Fasken's lease, and is separated from Fasken's lease by the Pennzoil 36 State Well No. 1 which has produced over 500,000 BO.

(c) The Pennzoil B 36 State No. 7 was overproduced, but for only five (5) weeks.

(d) All of Cimarex's wells in Section 36, adjoining Fasken's lease, are 660 feet from the east line of the section, although they could legally have been located 330 feet from the section line.

The Division concludes the following:

(13) The four (4) overproduced wells should not be shut-in to avoid loss of reserves and damage to the wells.

(14) The Mescalero 30 Federal Well No. 1, the Pennzoil 36 State Well No. 1, the Pennzoil B 36 State Well No. 2, and the Pennzoil B 36 State Well No. 7 have overproduced their allowable by 5,891, 5,692, 19,440, and 13,317 barrels of oil, respectively, for a total overproduction of 44,340 barrels of oil.

(15) Cimarex Energy Company of Colorado should make up the overproduction from the Pool whether or not it is responsible for the overproduction.

(16) The overproduction should be made up in the following manner: The Pool allowable is 275 barrels of oil per day with a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil produced. The current gas-oil ratios in the Pool range from 1,500 to 3,500 cubic feet of gas per barrel of oil, with a current average gas-oil ratio of 2,500. Then the Adjustment Factor (AF) should be calculated as follows: $AF = 2000/2500 = 0.8$. All the four wells that have over-produced will be assigned a new allowable as follows. New allowable = $0.8 \times 275 = 220$ barrels of oil per day. The number of barrels per day needed to make-up for previously overproducing from the Pool is equal to $275 - 220 = 55$ barrels of oil per day. The number of days needed for each of the overproduced wells to make up its overproduction should be equal to overproduction divided by the number of barrels needed to make up for the overproduction. For example, the number of days for the Mescalero 30 Federal Well No. 1 to make up its overproduction of 5,891 barrels of oil would be $5,891/55 = 108$ days. The results of similar calculations for all the four wells are shown in the following table.

Well Name and No.	New Allowable (BOPD)	Over-production (BO)	Days to make-up (D)
Mescalero 30 Federal Well No. 1	220	5,891	108
Pennzoil 36 State Well No. 1	220	5,692	104
Pennzoil B 36 State Well No. 2	220	19,440	354
Pennzoil B 36 State Well No. 7	220	13,317	243

(17) Cimarex should submit monthly reports to the Division to demonstrate that it is in compliance with the above adjustment plan. At the expiration of each well's adjustment period, the well should revert to its allowable of 275 barrels of oil per day.

IT IS THEREFORE ORDERED THAT:

(1) The application of Fasken Oil and Ranch, Ltd. for an order requiring Cimarex Energy Company of Colorado to comply with the Division's oil proration rules for the Apache Ridge-Bone Spring Pool is hereby approved.

(2) The application of Fasken Oil and Ranch, Ltd. for an order requiring Cimarex Energy Company of Colorado to immediately shut-in the four overproduced wells is hereby denied.

(3) Cimarex shall make up the overproduction from the four wells using the adjustment plan shown in the table below.

Well Name and No.	New Allowable (BOPD)	Over-production (BO)	Days to make-up (D)
Mescalero 30 Federal Well No. 1	220	5,891	108
Pennzoil 36 State Well No. 1	220	5,692	104
Pennzoil B 36 State Well No. 2	220	19,440	354
Pennzoil B 36 State Well No. 7	220	13,317	243

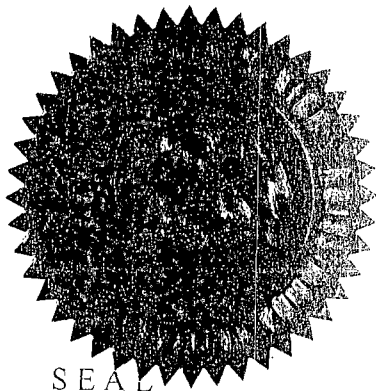
(4) Cimarex shall submit monthly reports to the Division to demonstrate that it is in compliance with the above adjustment plan. The new allowable for each of the four overproduced wells shall be 220 barrels of oil per day. At the expiration of each well's adjustment period as shown above, the well shall revert to its allowable of 275 barrels of oil per day.

(5) Cimarex shall submit the correct producing intervals in the Pennzoil 36 State Well No. 1 to the Division on or before January 10, 2009. Should Cimarex fail to submit the correct producing interval to the Division by this date, then further enforcement procedures should be brought against it.

(6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



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

MARK E. FESMIRE, P.E.
Director