

**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. 13243
(NOMENCLATURE)
Order No. R-12134*

**APPLICATION OF MEWBOURNE OIL COMPANY FOR POOL EXPANSION
AND SPECIAL POOL RULES FOR THE YOUNG-STRAWN POOL, LEA
COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 1, 2004, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 23rd day of April, 2004, 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, Mewbourne Oil Company ("Mewbourne"), seeks to expand the Young-Strawn Pool, which currently comprises the NE/4 of Section 20, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, to include the E/2 of Section 17, Township 18 South, Range 32 East, NMPM.

(3) Mewbourne further seeks to establish temporary special pool rules for the Young-Strawn Pool, including provisions for:

- (a) 80-acre spacing and proration units and designated well location requirements such that wells shall be located no closer than 330 feet to the outer boundary of the spacing unit nor closer than 330

feet to any quarter-quarter section line or subdivision inner boundary;

- (b) a gas-oil ratio limitation of 4,000 standard cubic feet of gas per barrel of oil; and
- (c) a special depth bracket allowable of 720 barrels of oil per day.

(4) The Young-Strawn Pool was created by Division Order No. R-5102 dated September 30, 1975.

(5) The Young-Strawn Pool is currently governed by Division Rule No. 104(B)(1), which requires standard 40-acre spacing and proration units with wells to be located no closer than 330 feet to the outer boundary of the proration unit. Pursuant to Division Rules No. 505.A. and 506.A., the Young-Strawn Pool is also subject to a daily oil allowable of 365 barrels of oil per day, and a gas-oil ratio limitation of 2,000 standard cubic feet of gas per barrel of oil.

(6) Mewbourne is the operator of the SF "17" Federal Com Well No. 1 (API No. 30-025-36345) located 1975 feet from the North line and 1422 feet from the East line (Unit G) of Section 17, and the SF "17" Federal Com Well No. 2 located 1910 feet from the South line and 1370 feet from the East line (Unit J) of Section 17, both in Township 18 South, Range 32 East, NMPM.

(7) The SF "17" Federal Com Well No. 1 was drilled by Mewbourne in August, 2003 to a total depth of approximately 12,900 feet. The well was initially completed in the Morrow formation through perforations from 12,342 feet to 12,599 feet. The Morrow interval was temporarily abandoned in January, 2004 and the well was recompleted to the Strawn interval through perforations from 11,441 feet to 11,528 feet.

(8) The SF "17" Federal Com Well No. 2 was drilled by Mewbourne in January, 2004 to a total depth of approximately 12,800 feet. The well was subsequently completed in the Strawn formation through perforations from 11,455 feet to 11,560 feet.

(9) The SF "17" Federal Com Well No. 1 is currently capable of producing less than 100 barrels of oil and less than 200 MCF of gas per day. The SF "17" Federal Com Well No. 2 is currently capable of producing in excess of 900 barrels of oil and 750 MCF of gas per day.

(10) The Young-Strawn Pool was discovered by the Atlantic Richfield Company Young Federal Well No. 1 located in Unit G of Section 20. This well produced from the Strawn formation from 1975 until 2000, at which time the well was re-completed to the Wolfcamp formation. From the Strawn interval, this well cumulatively produced approximately 103,000 barrels of oil and 0.2 BCF of gas.

(11) The Young Federal Well No. 1 and the SF "17" Federal Com Wells No. 1 and 2 are the only three wells that have produced from the Young-Strawn Pool.

(12) The applicant presented geologic evidence that demonstrates that:

- (a) there is a Strawn anticlinal ridge that traverses the E/2 of Section 17 and the NE/4 of Section 20 in a north to south direction;
- (b) the majority of this Strawn structure is located within the SE/4 of Section 17;
- (c) the Young Federal Well No. 1 and the SF "17" Federal Com Well No. 2 penetrated this Strawn structure in areas of high porosity, while the SF "17" Federal Com Well No. 1 penetrated this Strawn structure in an area of low porosity; and
- (d) the SF "17" Federal Com Well No. 2 appears to have penetrated this Strawn structure at a more geologically favorable location than the Young Federal Well No. 1.

(13) The applicant presented engineering evidence that demonstrates that:

- (a) the Young Federal Well No. 1 ultimately drained an area of approximately 51 acres within the subject pool;
- (b) the SF "17" Federal Com Well No. 2 appears to be located at a superior geologic position in the reservoir than the Young Federal Well No. 1 and consequently, the SF "17" Federal Com Well No. 2

should be capable of draining a larger area than the Young Federal Well No. 1;

- (c) the producing capability of the SF "17" Federal Com Well No. 2 is significantly higher than the initial producing rates obtained in the Young Federal Well No. 1; and
- (d) production test data obtained from the SF "17" Federal Com Well No. 2 show that producing the well at rates in excess of the current pool oil allowable does not result in an increase in the producing gas-oil ratio for the well.

(14) The geologic data presented by Mewbourne demonstrate that the SF "17" Federal Com Wells No. 1 and 2 should be placed within the Young-Strawn Pool.

(15) The preliminary engineering data show that increasing the pool oil allowable to 720 barrels of oil per day should not result in the excessive waste of reservoir energy, and should not reduce the ultimate recovery of oil from the Strawn interval.

(16) The preliminary engineering and geologic data further show that the SF "17" Federal Com Well No. 2 should be capable of draining an area in excess of 40 acres.

(17) The engineering data further show that the SF "17" Federal Com Well No. 1 is currently producing at a gas-oil ratio ranging from 1,100 to 8,500 standard cubic feet of gas per barrel of oil, and the SF "17" Federal Com Well No. 2 is currently producing at a gas-oil ratio of approximately 1,200 standard cubic feet of gas per barrel of oil. Mewbourne testified that the producing gas-oil ratio in these types of Strawn reservoirs generally increases over time, and it anticipates that this will occur within the Young-Strawn Pool during the next several months.

(18) Mewbourne's evidence does not support increasing the gas-oil ratio limitation for the Young-Strawn Pool at the present time; therefore that portion of Mewbourne's application should be denied.

(19) Mewbourne provided notice of its application to all overriding royalty interest owners within the E/2 of Section 17, and to all Division-designated operators of wells within the Strawn formation and within one mile of the outer boundary of the Young-Strawn Pool that have not been assigned to another pool. No operator or interest owner appeared at the hearing in opposition to the application.

(20) Temporary special pool rules that provide for 80-acre spacing and proration units, designated well location requirements such that wells shall be located no closer than 330 feet to the outer boundary of the spacing unit nor closer than 330 feet to any quarter-quarter section line or subdivision inner boundary, and a special depth bracket allowable of 720 barrels of oil per day should be established for the Young-Strawn Pool.

(21) The special pool rules for the Young-Strawn Pool established by this order should remain in effect for a temporary period of eighteen months in order to allow the operators in the pool the opportunity to obtain additional engineering data to support the permanent adoption of these rules.

(22) This case should be reopened at an examiner hearing in September, 2005, at which time the operators in the Young-Strawn Pool should appear to show cause why the temporary special pool rules established by this order should not be rescinded.

IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Mewbourne Oil Company, the Young-Strawn Pool, which currently comprises the NE/4 of Section 20, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, is hereby expanded to include the E/2 of Section 17, Township 18 South, Range 32 East, NMPM.

(2) "*Temporary Special Pool Rules for the Young-Strawn Pool*" are hereby established as follows:

TEMPORARY SPECIAL POOL RULES
FOR THE
YOUNG-STRAWN POOL

RULE 1. Each well completed in or recompleted in the Young-Strawn Pool, or in the Strawn formation within one mile thereof and not nearer to or within the limits of another designated Strawn pool, shall be spaced, drilled, operated, and produced in accordance with the special rules hereinafter set forth.

RULE 2. Each well completed or recompleted in the Young-Strawn Pool shall be located on a unit containing 80 acres, more or less, which consists of two contiguous quarter-quarter sections within a single governmental quarter section.

RULE 3. The Director may grant an exception to the requirements of Rule 2 in accordance with the procedure set forth by Division Rule No. 104.D.(2).

RULE 4. Each well shall be located no closer than 330 feet to the outer boundary of the spacing unit, nor closer than 330 feet to any quarter-quarter section line or subdivision inner boundary.

RULE 5. The Director may grant an exception to the requirements of Rule 4 in accordance with the procedure set forth by Division Rule No. 104.F.

RULE 6. The allowable for a standard 80-acre proration unit shall be 720 barrels of oil per day. In the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

RULE 7. The limiting gas-oil ratio shall be 2,000 cubic feet of gas per barrel of oil.

IT IS FURTHER ORDERED THAT:

(3) The location of all wells presently drilling to, or completed in, the Young-Strawn Pool, or in the Strawn formation within one mile thereof, are hereby approved. The operator of any well having an unorthodox location shall notify the Division's Hobbs District Office, in writing, of the name and location of the well within 30 days from the date of this order.

(4) Existing wells in the Young-Strawn Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, existing wells may have non-standard spacing and proration units established by the Division and dedicated thereto.

Failure to file new Form C-102 with the Division dedicating 80 acres to a well, or to obtain a non-standard unit approved by the Division within 60 days from the date of this order, shall subject the well to cancellation of allowable until a non-standard unit has been approved.

(5) This case shall be reopened at an examiner hearing in September, 2005, at which time the operators in the Young-Strawn Pool shall appear and present evidence to show cause why the temporary special pool rules established by this order should not be rescinded.

(6) That portion of Mewbourne Oil Company's application to establish a gas-oil ratio limitation of 4,000 standard cubic feet of gas per barrel of oil for the Young-Strawn Pool is hereby **denied**.

(7) Jurisdiction is hereby 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


JOANNA PRUKOP
Acting Director