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:

> NOMENCLATURE CASE NO. 11750 ORDER NO. R-10848

APPLICATION OF CHESAPEAKE OIL COMPANY FOR POOL CREATION, SPECIAL POOL RULES, AND THE ASSIGNMENT OF A DISCOVERY ALLOWABLE, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 1, 1997 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>31st</u> day of July, 1997, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant in this matter, Chesapeake Oil Company ("Chesapeake"), is the owner and operator of the Chambers "7" Well No. 1 (API No. 30-025-33623), located 1700 feet from the North line and 900 feet from the East line (Unit H) of Section 7, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, which was drilled to a total depth of 12,047 feet and subsequently completed in November, 1996 as a Strawn producing oil well through perforations from 11458 feet to 11468 feet.
- (3) By Division Order No. R-10776, issued in Case 11737, dated February 28, 1997 and made effective March 1, 1997, the Division created and defined the Northeast Shoe Bar-Strawn Pool for the production of oil from the Strawn formation, with its horizontal limits comprising the NE/4 of said Section 7. The discovery well for this pool was the aforementioned Chambers "7" Well No. 1. The poolwide depth bracket allowable was therefore established pursuant to General Rule 505.A as 365 barrels of oil per day.

- (4) By letter of application dated March 11, 1997, Chesapeake requested the Division, after notice and hearing, issue an order:
 - (a) creating a new pool for the production of oil from the Strawn formation comprising the S/2 NE/4 of said Section 7; and,
 - (b) providing for the promulgation of special poolwide rules and regulations therefor including provisions:
 - (i) for 80-acre oil spacing and proration units;
 - (ii) for designated well location requirements whereby wells would be permitted to be located no closer than 330 feet to any quarter-quarter section line with no more than one producing well for each 80-acre unit;
 - (iii) for a special limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil;
 - (iv) for a special depth bracket oil allowable of 445 barrels of oil per day per standard 80-acre unit; and,
 - (v) that each well completed or recompleted in this pool or in the Strawn formation within one mile thereof, shall be spaced, drilled, operated, and produced in accordance with these proposed special rules and regulations.

- (5) At the time of the hearing the applicant remained silent as to the assignment of a discovery allowable, per Division General Rule 509, for the above-described Chambers "7" Well No. 1, as indicated by the heading of this order or as advertised; therefore, that portion of this application can be dismissed.
- (6) Also, since many of the requests by Chesapeake in this matter are somewhat redundant with respect to established Division rules, procedures, and policies, as well as standard industry practices, it will be necessary to revise the application in order to address those issues that require a formal Division directive issued subsequent to a hearing.
- (7) That portion of Chesapeake's application seeking a pool creation can be dismissed at this time since Division Order No. R-10776 has already addressed the formation of a new pool for Strawn production attributable to its Chambers "7" Well No. 1.

FINDING: Any order issued in this matter should therefore apply to the Northeast Shoe Bar-Strawn Pool as created and defined by said Division Order No. R-10776.

- (8) The technical evidence presented by the applicant at the time of the hearing indicates that production from the Chambers "7" Well No. 1 is characteristic of other Strawn oil production in the general area such as the West Lovington-Strawn Pool, South Big Dog-Strawn Pool, Northeast Lovington-Pennsylvanian Pool, and Humble City-Strawn Pool, which are primarily Strawn oil producing pools, all of which produce from localized highly porous algal reef mounds within the Strawn formation. Chesapeake's evidence further indicates that the Strawn formation encountered in the above-described well is of high permeability and is capable of draining an area in excess of 40 acres.
- (9) The proposed 330-foot set back requirement is a departure from the established set-back requirements for 80-acre pools which restricts well locations to an area of 150 feet radius of the center of either quarter-quarter section or lot that comprise a single 80-acre unit.
- (10) Numerous location exceptions have been granted over time, not only in the above-mentioned pools but in most of the pools in southeastern New Mexico where these patch reefs/algal mounds are the trapping source of production within the Strawn formation, based on geology so as to increase the likelihood of a well intercepting these small localized geologic features thereby increasing the chances of a well becoming commercially productive.

FINDING: The 330-foot set-back request with a limitation of one well per proration unit would serve to provide the operators in the subject pool maximum flexibility in locating wells at more favorable positions on the reef mound or mounds in the immediate area.

- (11) In order to: (i) assure orderly development of the proposed pool, (ii) prevent the economic loss caused by the drilling of unnecessary wells, (iii) avoid the augmentation of risk arising from the drilling of an excessive number of wells, (iv) prevent reduced recovery which might result from the drilling of too few wells, and (v) to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units along with the proposed well location restrictions should be promulgated for the proposed pool.
- (12) Division General Rule 506.A provides that all pools be limited to a gas/oil ratio of 2,000 cubic feet of gas per barrel of oil unless otherwise provided for by special pool rules; therefore, Chesapeake's request for a special 2,000 to one GOR limitation is currently in effect and can therefore be dismissed.
- (13) Pursuant to Division General Rule 505.A the depth bracket oil allowable for production at depths from 11,000 feet to 11,999 feet is 445 barrels of oil per day. Chesapeake's request for a special depth bracket oil allowable of 445 barrels of oil per day per spacing unit can also be dismissed.
- (14) Division General Rule 104.A defines a development well in southeast New Mexico as a well within one mile of a pool and subject to said rules governing that pool; therefore, this rule satisfies the applicant's request that all wells within one mile of a particular pool be spaced, drilled, operated, and produced in accordance with any special pool rules herein adopted.
- (15) The evidence presented in this matter, along with the records on file with the Division indicates a need for the special rules to be adopted for this pool be made retroactive as of April 3, 1997.
- (16) No other operator and/or interest owner appeared at the hearing in opposition to the subject application.
- (17) As suggested by the applicant this case should be reopened at an examiner hearing in February, 1999, at which time the operators in the Pool should be prepared to appear and present evidence and testimony as to the nature of the reservoir with regards to making these rules permanent and to show cause why said pool should not be developed either on standard statewide 40-acre spacing or with an optional second well on each 80-acre tract.

IT IS THEREFORE ORDERED THAT:

- (1) The effective date for this order and all provisions included therein shall be made retroactive back to April 3, 1997.
- (2) The Temporary Special Rules and Regulations for the Northeast Shoe Bar-Strawn Pool, currently comprising the NE/4 of Section 7, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, are hereby promulgated as follows:

TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE NORTHEAST SHOE BAR-STRAWN POOL

- <u>RULE 1</u>: Each well completed or recompleted in the Northeast Shoe Bar-Strawn Pool or in the Strawn formation within one mile thereof, and not nearer to or within the limits of another Strawn oil pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- <u>RULE 2</u>: Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2 or W/2 of a governmental quarter section.
- <u>RULE 3</u>: The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been duly filed under the provisions of Rule 104.d(2) of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11351 on January 18, 1996.
- <u>RULE 4</u>: Only one well per 80-acre unit shall be permitted and the location of such well shall be located no closer than 330 feet to any quarter-quarter section line.
- <u>RULE 5</u>: The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been duly filed under the provisions of Rule 104.F of said General Rules and Regulations of the Division.

- (3) The locations of all wells presently drilling to or completed in the Northeast Shoe Bar-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 Hobbs District Office of the Division in writing of the name and location of the well within thirty days from the date of this order.
- Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the Northeast Shoe Bar-Strawn Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within sixty days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said sixty-day limitation, each well presently drilling to or completed in the Northeast Shoe Bar-Strawn Pool or in the Strawn formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(5) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in February, 1999, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the Northeast Shoe Bar-Strawn Pool should not be rescinded and said pool not be developed either on statewide 40-acre spacing or with an optional second well on each 80-acre unit.

IT IS FURTHER ORDERED THAT:

- (6) The portion of the application of Chesapeake Oil Company for the:
 - (a) creation of a new pool for the production of oil from the Strawn formation comprising the S/2 NE/4 of said Section 7;
 - (b) the promulgation of special poolwide rules and regulations therefor including provisions:
 - (i) for a special limiting gas/oil ratio of 2,000 cubic feet of gas per barrel of oil;

- (ii) for a special depth bracket oil allowable of 445 barrels of oil per day per standard 80-acre unit; and,
- (iii) that each well completed or recompleted in this pool or in the Strawn formation within one mile thereof, shall be spaced, drilled, operated, and produced in accordance with these proposed special rules and regulations; and,
- (c) the assignment of a discovery allowable, per Division General Rule 509, for its Chambers "7" Well No. 1 (API No. 30-025-33623), located 1700 feet from the North line and 900 feet from the East line (Unit H) of said Section 7;

is hereby dismissed.

(7) Jurisdiction of this cause 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

WILLIAM J. LIMAY Director

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