

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. 9416
ORDER NO. R-8756

APPLICATION OF UNION OIL COMPANY
OF CALIFORNIA d/b/a UNOCAL FOR
SPECIAL POOL RULES AND AN UNORTHODOX
GAS WELL LOCATION, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 22, 1988, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

Now, on this 11th day of October, 1988, 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) Applicant, Union Oil Company of California d/b/a Unocal, seeks establishment of Special Pool Rules for the House Yates-Seven Rivers Gas Pool, Lea County, New Mexico, including provisions for 80-acre spacing and proration units with wells to be located within 150 feet of the center of either quarter-quarter section.

(3) Applicant also seeks an exception to the well location requirements of the proposed new special rules for the Fletcher Well No. 1 to be re-entered at an unorthodox gas well location 1980 feet from the North line and 330 feet from the West line of Section 5, Township 20 South, Range 39 East, NMPM, Lea County, New Mexico.

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(4) By Order No. R-7048, dated September 1, 1982, the Division created the House Yates-Seven Rivers Gas Pool in Lea County, New Mexico which has been governed under statewide rules since that time.

(5) Presently, the subject pool is being developed in the following manner:

<u>Well Name & No.</u>	<u>Operator</u>	<u>Location</u> <u>(U-S-T-R)</u>	<u>Date of</u> <u>1st</u> <u>Connection</u>	<u>Presently</u> <u>Producing</u>	<u>Proration</u> <u>Unit</u>
J. Speight No. 1	MGF Oil Corp.	P-31-19S-39E	07/12/82	YES	SE/4 - 160 acres
MGF - Sun No. 1	MGF Oil Corp.	N-32-19S-39E	07/07/82	YES	SW/4 - 160 acres
L. O. Jones No. 1	Zia Energy, Inc.	H-01-20S-38E	12/24/86	NO	NE/4 - 160 acres
J. Wright No. 1	MGF Oil Corp.	D-05-20S-39E	06/28/82	YES	N/2 NW/4 - 80 acres (Approved by R-6851-A)
Hurd No. 1	TXO Prod. Corp.	J-06-20S-39E	-----	NO	SE/4 - 160 acres

(6) The geological and engineering evidence presented at the hearing indicates the following:

- a) The trapping mechanism for the House Yates-Seven Rivers Gas Pool is a combination of structure and stratigraphy. Structurally the field is an east to west trending anticline. The stratigraphic nature of the trap results from porous sandstone stringers which thicken to the northeast and are draped across the structure.
- b) Production from this reservoir is from sandstone stringers which were laid down in an intertidal to supratidal depositional setting. Periods of transgression and regression resulted in the deposition of interbedded tight dolomites, evaporites and pay sands. The sand porosity stringers are normally four to six feet thick but produce significant quantities of gas. Porosity in the pay zones range from 12% to 28%.
- c) One well will not adequately drain 160 acres.

(7) The limited development of this pool has been with wells that are located compatibly with an 80-acre spacing pattern.

(8) The applicant, however, failed to provide sufficient evidence to show that changing the spacing unit size to 80 acres would not result in the loss of some leases formerly dedicated to communitized 160-acre proration units and other disturbances of historical equities under the pre-existing proration units within the pool.

(9) The net result of the applicant's request could possibly deprive owners of their correlative rights within said pool.

(10) The correlative rights of the owners within said pool may be protected and effective and efficient drainage therefrom may be provided by permitting the infill drilling of one additional well on each 160-acre proration unit.

(11) No more than two wells should be permitted to produce from any 160-acre proration unit within said pool without authorization of the Director of the Division.

(12) To assure orderly development of the pool and to protect correlative rights, the special rules and regulations promulgated by this order should include restrictive well location requirements which provide that wells be located in the SE/4 and NW/4 of a quarter section and that said wells not be closer than 660 feet to the outer boundary of the proration unit, nor nearer than 330 feet to a governmental quarter-quarter section or subdivision inner boundary.

(13) The Fletcher Well No. 1 was originally drilled and located at an orthodox oil well location to test the San Andres formation from which it no longer produces in commercial quantities. Under the proposed Special Pool Rules for the House Yates-Seven Rivers Gas Pool this is an unorthodox location, but recompletion of the well will enable applicant to efficiently test and produce the Seven Rivers formation, and an exception for this location should therefore be approved.

(14) The S/2 NW/4 of said Section 5 is to be dedicated to said Fletcher Well No.1, thereby forming a non-standard 80-acre gas spacing and proration unit for said pool. The N/2 NW/4 of said Section 5 is presently dedicated to the MGF Oil Corp. J. Wright Well No. 1 located in Unit D of said Section 5 (see R-6851-A for approval of an 80-acre non-standard gas spacing and proration unit). To provide for orderly development in the subject pool, these exceptions to the 160-acre spacing rule should be recognized and continue in full force and effect.

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IT IS THEREFORE ORDERED THAT:

(1) The application of Union Oil Company of California d/b/a Unocal to establish 80-acre spacing and proration units for the House Yates-Seven Rivers Gas Pool in Lea County, New Mexico is hereby denied; however, 80-acre well density is appropriate for the pool.

(2) In the alternative, the following Special Rules and Regulations for said House Yates-Seven Rivers Gas Pool are hereby promulgated:

SPECIAL RULES AND REGULATIONS FOR
THE HOUSE YATES-SEVEN RIVERS
GAS POOL

RULE 1: Each well completed or recompleted in the House Yates-Seven Rivers Gas Pool or in the Yates and/or Seven Rivers formations within one mile of the House Yates-Seven Rivers Gas Pool, and not nearer to or within the limits of another designated Yates-Seven Rivers pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2: (A) Each well completed or recompleted in the House Yates-Seven Rivers Gas Pool shall be located on a standard unit containing 160 acres, more or less, consisting of a single governmental quarter section.

(B) Nothing in this rule shall be construed as prohibiting the drilling of one additional well on a standard proration unit provided that there shall be no more than two producible wells on any one proration unit at one time.

RULE 3: The Director of the Division may grant an exception to the requirements of Rule 2A without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey, or the following facts exist and the following provisions are complied with:

- (A) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (B) The non-standard unit lies wholly within a single governmental quarter section.
- (C) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (D) In lieu of Paragraph (C) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Director has received the application.

RULE 4: Each well completed or recompleted in the House Yates-Seven Rivers Gas Pool shall be located on the SE/4 or NW/4 of the quarter section and shall be located no closer than 660 feet to the outer boundary of the proration unit, nor nearer than 330 feet to a governmental quarter-quarter section or subdivision inner boundary. No two producing wells dedicated to a single proration unit shall be in the same quarter-quarter section

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or lot at any time.

RULE 5: The Division Director may grant an exception to the requirements of the first sentence of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographic conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed unorthodox location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operators have entered an objection to the unorthodox location within 20 days after the Director has received the application.

IT IS FURTHER ORDERED THAT:

(3) The applicant's request to re-enter the Fletcher Well No. 1 located at an unorthodox gas well location for this pool 1980 feet from the North line and 330 feet from the West line of Section 5, Township 20 South, Range 39 East, NMPM, Lea County, New Mexico, the S/2 NW/4 of said Section 5 to be dedicated to said well forming a non-standard 80-acre gas spacing and proration unit for said pool, is hereby approved.

(4) Division Order No. R-6851-A which authorized a non-standard 80-acre gas spacing and proration unit for the MGF Oil Corporation J.Wright Well No. 1 located at a standard gas well location in the NW/4 NW/4 (Unit D) of said Section 5 shall remain in full force and effect until further notice.

(5) The locations of all wells presently drilling to or completed in the House Yates-Seven Rivers Gas Pool or in the Yates or Seven Rivers formations 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 on or before December 15, 1988.

(6) Jurisdiction of this cause 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

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