# STATE OF NEW MEXICO

# ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

October 12, 1988

GARREY CARRUTHERS

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Mr. William F. Carr Campbell & Black Attorneys at Law Post Office Box 2208 Santa Fe, New Mexico	Re:	CASE NO. 3416 ORDER NO. R-3756  Applicant: Union Oil Company of California d/b/a Unocal
Dear Sir:		
Enclosed herewith are two cop Division order recently enter		
Sincerely,		
FLORENE DAVIDSON OC Staff Specialist		
Copy of order also sent to:		
Hobbs OCDArtesia OCDAztec OCD		
Other <u>Henry</u> Hansen		

#### CAMPBELL & BLACK, P.A.

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July 1, 1988

M.S.

#### HAND DELIVERED

Mr. Michael E. Stogner
Examiner
Oil Conservation Division
New Mexico Department of
Energy, Minerals and Natural Resources
State Land Office Building
Santa Fe. New Mexico 87503

Re: OCD Case No. 9416
In the Matter of the Application of Union Oil
Company of California d/b/a Unocal for Establishment
of Special Pool Rules for the House Yates Seven Rivers Pool; and for Exception to the Proposed
Pool Rules for an Unorthodox Well Location,
Lea County, New Mexico

# Dear Mr. Stogner:

Pursuant to your request of June 22, 1988, I am enclosing for your consideration a proposed Order in the above-referenced case. As you will note, this Order provides for test data on the Fletcher No. 1 Well which would establish a radius of drainage for this well in the House Yates - Seven Rivers Pool. The draft provides that efforts to obtain this information shall be coordinated with the Hobbs District Office and that, if in your opinion such data warrants reopening this case, the matter can be called back before you at an early date.

We have reviewed Unocal's records concerning contacts made with MGF Oil Corporation and can advise that although our records show that this matter was discussed with MGF on a couple of occasions in late February and early March, 1988, we are unable to identify the person with whom these discussions were held. As you perhaps know, MGF is currently in the process of being sold to a group called Parker and Parsley. The individual who is in charge of these properties for Parker and Parsley is Mike Reeves (telephone number: (915) 683-4768) with whom we have discussed our application. Mr. Reeves indicates that they have no objection to

Mr. Michael E. Stogner July 1, 1988 Page Two

what we are proposing and if you have additional concerns about notice having been given to MGF or its successor, do not hesitate to contact Mr. Reeves. Otherwise, we can advise that the notice requirements of Division Rules were fully complied with prior to hearing.

You also discussed with me following the hearing a geological description of the reservoir. We have included in our proposed Order (Finding 4) a brief geological description. At the time of the hearing, the following testimony was provided concerning the reservoir:

The trapping mechanism for the House Seven Rivers Field 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.

Production in the Seven Rivers 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, evaporates 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%.

I believe this covers all the matters which you requested at the June 22, 1988 hearing. If you desire anything further from Unocal please advise.

Very truly yours,

WILLIAM F. CARR

WFC/mlh Enclosure

cc: Mr. John Gray
Mr. Wayne Strong

# 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.

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 \_\_\_\_\_ day of July, 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) By Order No. R-7048, dated September 1, 1982, the Division created the House Yates Seven Rivers Pool in Lea County, New Mexico which has been developed under state wide rules.
- (3) Applicant, Union Oil Company of California d/b/a Unocal seeks establishment of Special Pool Rules for the House Yates Seven Rivers Pool, Lea County, New Mexico, including provisions for 80-acre spacing or proration units with wells to be located within 150 feet of the center of either quarter-quarter section. Applicant also seeks an exception to these proposed rules for an unorthodox well location.

- (4) Production from the Yates Seven Rivers formation is from sandstone stringers which are normally four to six feet thick with porosity in the pay zones ranging from 12% to 28%.
- (5) Applicant plans to drill additional wells in the area and reducing the spacing units from 160-acres to 80-acres will encourage development of the Seven Rivers formation in this area, avoid unnecessary administrative hearings and will not impair the correlative rights of any interest owner.
- (6) The evidence established that there has been limited development of the Seven Rivers formation in this pool and that current production is from wells located on an effective 80-acre spacing pattern.
- (7) The evidence established that no wells in the pool can drain the 160-acres dedicated to it and that 80-acre spacing units would most accurately correspond to the acreage wells in the pool can drain and, therefore, special pool rules including provisions for 80-acre spacing and proration units should be approved.
- (8) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights, special pool rules and regulations providing for 80-acre spacing units should be promulgated for the House Yates Seven Rivers Pool.
- (9) These special rules and regulations should also provide for restrictive well locations in order to assure orderly development of the pool and protect correlative rights.
- (10) The Fletcher No. 1 Well was originally drilled and located at an orthodox 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 Pool this is an unorthodox location, but recompletion of the well, will enable applicant to most efficiently test and produce the Seven Rivers formation, and an exception for this location should therefore be approved.

#### IT IS THEREFORE ORDERED THAT:

(1) Special Pool Rules for the House Yates - Seven Rivers Pool are hereby promulgated as follows:

### HOUSE YATES - SEVEN RIVERS POOL

- RULE 1. Each well completed or recompleted in the House Yates Seven Rivers Pool or in the Seven Rivers formation within one mile thereof, and not nearer to or within the limits of another designated Seven Rivers Pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules hereinafter set forth.
- RULE 2. 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 being a legal subdivision of the United States Public Lands Survey; provided, however, nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.
- RULE 3. The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a single governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit 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 operator has entered an objection to the formation of the non-standard unit within thirty (30) days after the Director has received the application.
- RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.
- RULE 5. The Director may grant an exception to the requirements of Rule 4 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed 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 operators offsetting the proposed location or if no objection to the unorthodox location has been entered within twenty (20) days after the Director has received the application.

#### IT IS FURTHER ORDERED THAT:

- (2) The locations of any other wells drilling to or completed on or before the date of this Order in the House Yates Seven Rivers Pool or within one mile thereof, and not nearer to or within the limits of another designated Seven Rivers Pool, 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 October 1, 1988.
- (3) Pursuant to Paragraph A. of Section 70-2-18, N.M.S.A., 1978 Comp., contained in Laws of 1969, Chapter 271, existing wells in the House Yates Seven Rivers 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 (60) days from the date of this Order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said sixty (60) day limitation, each well presently drilling to or completed in the House Yates - Seven Rivers Pool or in its corresponding vertical limits as described in Ordering Paragraph No. (1) above, within one mile thereof shall receive no more than one-half of a standard allowable for said pool.

- (4) Applicant shall contact the District Supervisor of the Division's Hobbs District Office and conduct such pressure tests as the District Supervisor may require to determine the drainage radius for the Fletcher No. 1 Well. This data shall promptly be furnished to the Division which may require that this case be reopened and applicant required to show cause why this pool should not be developed on 160-acre spacing units.
- (5) 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

(S E A L)