### STATE OF NEW MEXICO



### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

ANITA LOCKWOOD CABINET SECRETARY

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

July 6, 1993

CAMBELL, CARR, BERGE & SHERIDAN
Attorneys at Law
P. O. Box 2208
Santa Fe, New Mexico 87504

RE: CASE NO. 10748

ORDER NO. R-9922

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Sally E. Leichtle

Administrative Secretary

cc:

BLM Carlsbad Office Alvin Tapia - OCD Donna McDonald - OCD

Scott Hall

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WILLIAM K. STRATVERT, COUNSEL PAUL W. ROBINSON, COUNSEL REED L. FROST, COUNSEL

June 30, 1993

PLEASE REPLY TO SANTA FE

**HAND-DELIVERED** 

Mr. David Catanach
New Mexico Oil Conservation Division
State Land Office Building

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

te: NMOCD Case No. 10748; Application of Yates Petroleum

Corporation for Special Pool Rules, Eddy County,

New Mexico

Dear Mr. Catanach:

As you requested, enclosed for your consideration is a draft order presented on behalf of Nearburg Producing Company in connection with the above matter.

Should you require additional information, please do not hesitate to contact me.

Very truly yours,

MILLER, STRATVERT, TORGERSON & SCHLENKER, P.A.

J. Scott Hall

7. Swin dall

JSH/mp Enclosure

cc w/encl.: Bob Shelton

Bill Carr Tom Kellahin Jim Bruce

## 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.	10748	
ORDER	NO.	R-	

APPLICATION OF YATES PETROLEUM CORPORATION FOR POOL CREATION, CLASSIFICATION OF THE NEW POOL AS AN ASSOCIATED POOL AND THE PROMULGATION OF SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO

### ORDER OF THE DIVISION

### BY THE DIVISION

This cause came on for hearing on June 17, 1993, at Santa Fe, New Mexico, before Examiner David Catanach.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 1993, the Division, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- 1. That Applicant seeks the creation of a new pool in the Upper Pennsylvanian formation and classification of the new pool as an Associated Oil and Gas Pool in accordance with the General Rules and Regulations for Associated Oil and Gas Pools under Order No. R-5353.
- 2. That the initial horizontal limits of the new pool are proposed to include the following lands (the "subject lands"):

## Township 22 South, Range 24 East, NMPM Section 17: W/2

- 3. That this pool was discovered by the Yates Hickory "ALV No. 1, located in Unit \_\_\_\_ on the subject lands, with vertical limits consisting of the interval found at a depth of 8135 feet to 8340 feet on the compensated Neutron Lithodensity Log for the well dated October 20, 1992.
- 4. That Applicant also seeks promulgation of Special Pool Rules and Regulations to include the following provisions: 320 acre spacing and proration units; special well location requirements providing for all wells to be located 660 feet from the outer boundary of a spacing or proration unit and 330 feet from a quarter

section line; a limit of no more than one well per quarter section; a special depth bracket allowable for each well on a 320 acre spacing or proration unit of 1,400 barrels of oil per day; and procedures for the administrative approval of unorthodox well locations and non-standard spacing units.

- 5. That Nearburg Producing Company appeared in opposition to any provision of the proposed pool rules imposing a limit of one well per quarter section or otherwise inconsistent with Rule 22 of Order No. R-5353 for the South Dagger Draw-Upper Pennsylvanian Associated Pool.
  - 6. That the evidence presented at the hearing establishes:
- (a). That the producing interval of the Yates Hickory "ALV" No. 1 well drilled on the subject lands comprises a portion of a down dip oil leg extending from the Indian Basin-Upper Pennsylvanian Gas Pool, and as such, is geologically similar or identical to the South Dagger Draw-Upper Pennsylvanian associated pool. No evidence was presented which tended to show that the producing and geological characteristics of the Upper Pennsylvanian formation in the South Dagger Draw pool and the subject lands were in any way dissimilar.
- (b) That individual wells in the South Dagger Draw and the subject lands are incapable of efficiently and effectively draining 160 acres. Rather, the evidence shows that the wells are draining between 60 and 80 acres.
- (c). That the reservoir cannot be efficiently and effectively drained by limiting drilling to one well per each quarter section.
- (d). That the ability of an operator to drill two or more wells on a 320 acre unit will allow for the greater ultimate recovery of hydrocarbon reserves.
- (e). That a limit of one well per quarter section will not maximize recovery but will instead increase the likelihood that otherwise recoverable reserves will be abandoned.
- (f). That a provision in the proposed Rules allowing for a single well or two or more wells on 320 acre units in the area and on the subject lands does not adversely affect the economics of drilling in the pool.
- (g). That variations among the special pool rules and regulations for similar associated oil and gas pools have caused confusion and have resulted in unnecessary administrative burden to both the operators in said pools and the Division, and should thus be avoided.

- 7. That a new associated oil and gas pool for Upper Pennsylvanian (Cisco Canyon) should be created and designated the Southeast Dagger Draw-Upper Pennsylvanian Associated Pool consisting of the subject lands with vertical limits from a depth of 8135 feet to 8340 feet.
- 8. That in order to afford the owner of each property in the pool the opportunity to produce his just and equitable share of reserves in the pool, to prevent the reduced recovery which might result from drilling too few wells and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations governing the Southeast Dagger Draw-Upper Pennsylvanian Associated Pool should provide that all or any part of the unit allowable may be produced by a single well or by two or more wells on the unit.
- 9. That the creation of a new pool in the Upper-Pennsylvanian formation, classification of the pool as an Associated Oil and Gas Pool and adoption of Special Pool Rules and Regulations, including a provision consistent with Rule 22 of Order No. R-5353 for the South Dagger Draw Associated-upper Pennsylvanian Associated Pool, will prevent waste and protect correlative rights, is in the interests of conservation and should therefore be approved.

### IT IS THEREFORE ORDERED:

1. That a new pool in Eddy County, New Mexico, classified as an associated oil and gas pool for Upper Pennsylvanian production is hereby created and designated the Southeast Dagger Draw Upper Pennsylvanian Associated Pool, consisting of the following-described area:

### Township 22 South, Range 24 East, NMPM Section 17: W/2

2. That Special Rules and Regulations for the Southeast Dagger Draw Upper Pennsylvanian Pool are hereby promulgated as follows, effective \_\_\_\_\_\_\_, 1993.

## SPECIAL RULES AND REGULATIONS FOR THE

#### SOUTHEAST DAGGER DRAW UPPER PENNSYLVANIAN ASSOCIATED POOL

RULE 1. Any well drilled to the producing interval of the Southeast Dagger Draw Upper Pennsylvanian Associated Pool regulated by this order and within said pool or within one mile outside the boundary of this pool and not nearer to or within the boundaries of another designated pool producing from the same formation shall be spaced, drilled, operated and prorated in accordance with the regulations in effect for this pool.

- RULE 2. A standard oil proration unit shall be 320 acres. A standard gas proration unit shall be 320 acres.
- RULE 3. Each well shall be located no nearer than 660 feet to the nearest side boundary of the tract and not nearer than 660 feet to the nearest end boundary of the tract and not closer than 330 feet to any quarter-quarter section of a subdivision inner boundary.
- RULE 4. The limiting gas-oil ratio shall be 10,000 cubic feet of gas for each barrel of oil produced.
- RULE 5. The special depth bracket allowable for a 320 acre proration unit shall be 1400 barrels of oil per day. All or any part of the allowable may be produced by a single well or by two or more wells on the unit. However, the total oil allowable assigned to a 320 acre unit shall not exceed 1400 barrels per day.
- RULE 6. The Division shall have the authority to grant administrative approval without notice and hearing for exceptions to well location requirements pursuant to the procedures set forth in Rule 2(c) for the General Rules and Regulations for Associated Oil and Gas Pools (Order No. R-5353).
- RULE 7. The Division shall have the authority to grant administrative approval without notice and hearing for a non-standard unit pursuant to the procedures set forth in Rule 4(a) for the General Rules and Regulations for Associated Oil and Gas Pools (Order No. R-5353).
- RULE 8. The General Rules and Regulations for Associated Oil and Gas Pools shall also apply unless in conflict with these Special Pool Rules.
- 3. That 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. LEMAY, DIRECTOR

## CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

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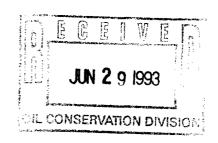
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June 29, 1993

### **HAND-DELIVERED**

Mr. David R. Catanach
Hearing Examiner
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
State Land Office Building
Santa Fe, New Mexico 87503



Re: Case No 10748:

Application of Yates Petroleum Corporation for Pool Creation, Classification of the New Pool as an Associated Pool and for Special Pool Rules, Eddy County, New Mexico

Dear Mr. Catanach:

Pursuant to your request of June 17, 1993, I am enclosing Yates Petroleum Corporation's proposed Order of the Division in the above-referenced case.

If you need anything further from Yates to proceed with your consideration of this matter, please advise.

Very truly yours,

WILLIAM F. CARR

WFC:mlh Enclosure

cc w/enc.: David Boneau

Brent May

### 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. 10748	
Order No. R-	

APPLICATION OF YATES PETROLEUM CORPORATION FOR POOL CREATION, CLASSIFICATION OF THE NEW POOL AS AN ASSOCIATED POOL AND FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.

## YATES PETROLEUM CORPORATION'S PROPOSED ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 17, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_\_ day of July, 1993, 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) Yates Petroleum Corporation (hereinafter referred to as the "applicant") seeks an order creating a new pool for the production of oil and gas from the Pennsylvanian formation underlying the West half of Section 17, Township 22 South, Range 24 East, N.M.P.M., Eddy County, New Mexico. Applicant also seeks classification of this new pool as an associated oil and gas pool and the promulgation of special rules and regulations for the pool including: 320-acre spacing and proration units; designated well location requirements; a limit of no more than one well per quarter section; a special depth bracket allowable for each 320-acre spacing or proration unit of 1400 barrels of oil per day and; administrative procedures for approval of unorthodox well locations and non-standard spacing or proration units.

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- (3) At the time of the hearing, Nearburg Producing Company appeared and presented testimony in opposition to the request for a limit of one well per quarter section.
- (4) Marathon Oil Company and Santa Fe Energy Operating Partners, L.P., each entered their appearance at the hearing as a party affected by this case.
- (5) Applicant reentered the Hickory ALY Federal #1 Well (Originally the Pan American Hollowell A USA #1 Well) which is located 1650 feet from the North and West lines of Section 17 South, Township 22 South, Range 24 East in October, 1992 and, after producing the well for a short time in the Morrow, completed the well in the Upper Pennsylvanian (Cisco Canyon) formation in the perforated interval from 8139 feet to 8154 feet and from 8242 feet to 8259 feet. The well initially flowed oil at rates between 100 and 300 BOPD and after being acidized pumped 408 barrels of oil, 1197 barrels of water and 511 mcf of gas on June 14, 1993.
- (6) This well offsets to the Southeast the Indian Basin-Upper Pennsylvanian Gas Pool and, prior to the drilling of this well, there was no known oil production from this portion of the Upper Pennsylvanian formation.
- (7) The oil produced by the Hickory #1 Well is from a zone which is structurally lower than the gas zone in the Indian Basin-Upper Pennsylvanian Gas Pool and the gravities of the oil are lower than the condensate produced from the Indian Basin-Upper Pennsylvanian Gas Pool and is similar to oil produced from the south Dagger Draw-Upper Pennsylvanian Associated Pool which is located approximately 10 miles north of the Hickory No. 1 Well.
- (8) The data available on the Upper Pennsylvanian formation establishes that the dolomite in the Hickory No. 1 Well is similar to the dolomite in the oil leg of the South Dagger Draw-Upper Pennsylvanian Pool but is separated from this pool by a dolomite void between the two areas.
- (9) The evidence established that the Hickory No. 1 Well is producing oil from a portion of the Upper Pennsylvanian formation that has not previously produced, is separate from the other portions of this formation which have produced oil and is producing down structure from the gas productive portion of the formation.
- (10) The application of Yates Petroleum Corporation for the creation of a new pool for the production of oil and gas from the Pennsylvanian formation underlying the West half of Section 17, Township 22 South, Range 24 East, and the classification of this new pool as an associated pool should be granted.

Case No. 10748 Order No. R-\_\_\_\_\_ Page 3

- (11) Although there is only limited geological and engineering data available on this new pool, it appears to be similar to the South Dagger Draw-Upper Pennsylvanian Associated Pool and the adoption of Special Rules and Regulations for this new pool similar to the Special Rules and Regulations for South Dagger Draw including 320-acre spacing and proration units, the location of wells no closer than 660 feet to the nearest side or end boundary of the tract, nor closer than 330 feet to any quarter-quarter section of any subdivision inner boundary, and a special depth bracket allowable for a 320-acre spacing or proration unit of 1400 barrels of oil per day will prevent waste and protect correlative rights.
- (12) The evidence demonstrated that in the past portions of the Upper Pennsylvanian formation may have been over developed with 40-acre spacing units which has resulted in the drilling of unnecessary wells and the inefficient development of this formation.
- (13) Although Nearburg opposed the requested limitation of one well per quarter section, over development of this portion of the Upper Pennsylvanian formation can only be prevented by the adoption of this limitation on a temporary basis. After additional wells are drilled and more data is available on this formation, permanent pool rules and regulations can be adopted with well spacing requirements which best reflect the producing characteristics of the reservoir.
- (14) To avoid potential overdevelopment of this portion of the Upper Pennsylvanian formation and to protect the correlative rights of all interest owners in this pool, temporary rules should be promulgated which limit the number of wells drilled in this new pool to no more than one well per quarter section.
- (15) The special rules and regulations should be established for a temporary period of two years and this case should be reopened in July, 1995 to permit operators in the subject pool to appear and show why the temporary rules promulgated herein should not remain in effect.
  - (16) The application for special pool rules on a temporary basis should be granted.

### IT IS THEREFORE ORDERED THAT:

(1) Effective July 1, 1993 a new pool is hereby created and designated the Indian Basin-Upper Pennsylvanian Associated Pool with vertical limits consisting of the Upper Pennsylvanian (Cisco Canyon) formation as found from a depth of 8139 feet to 8259 feet on the log of the Yates Petroleum Corporation Hickory ALY Federal No. 1 Well located in Unit F of Section 17, Township 22 South, Range 24 East, N.M.P.M., Eddy County, New Mexico, and horizontal limits defined as:

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### Township 22 South, Range 24 East, N.M.P.M.

### Section 17: W/2

- (2) The Indian Basin-Upper Pennsylvanian Associated Pool is hereby classified as an associated oil and gas pool and shall be operated in accordance with the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico unless these general rules are in conflict with the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool hereinafter promulgated in which case the provisions of these special rules and regulations shall control.
- (3) Effective July 1, 1993, temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, Eddy County, New Mexico, are hereby promulgated as follows:

# SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL

RULE 2(a). A standard oil proration unit shall be 320-acres.

RULE 2(b). Each well shall be located no nearer that 660 feet to the nearest side or end boundary of the tract, nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. No more than one well per quarter section shall be permitted on a proration unit.

RULE 22. The special depth bracket allowable for a 320-acre proration unit shall be 1400 barrels of oil per day. All or any part of the allowable may be produced by a single well or by two wells on the unit. However, total oil allowable assigned to a 320-acre unit shall not exceed 1400 barrels per day.

- (4) This cause shall be reopened in July, 1995 to permit operators in the subject pool to appear and show cause why the special rules promulgated herein should remain in effect.
- (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

SEAL