

COUNTY *Eddy*

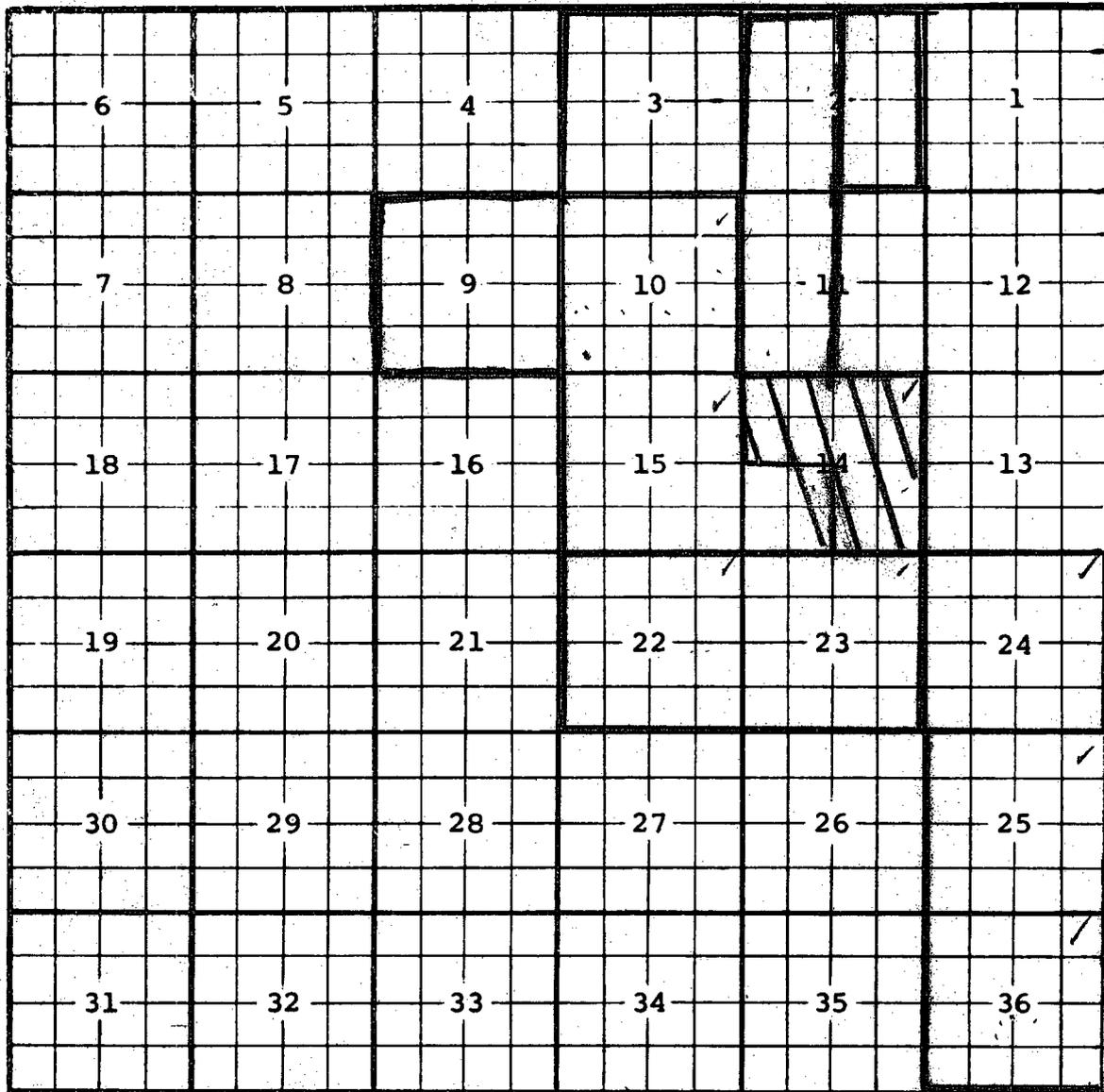
POOL

Indian Basin - Morrow Gas

TOWNSHIP *21 South*

RANGE *23 East*

NMPM



Description: All Sec. 22 & 23 (R-2441, 7-78-63)

Ext: All Sec. 10, 14 & 15 (R-2569, 10-1-63) - All Sec. 24 (R-2726, 7-1-64)

- All Sec. 25 & 36 (R-2911, 6-1-65) EXT: All Sec 9 (R-9418, 2-1-91)

Ext: $\frac{1}{2}$ Sec. 2, $\frac{1}{2}$ Sec. 11 (R-10376, 5-24-95)

Ext: Lots 1 and 2, $\frac{1}{2}$ $\frac{NE}{4}$, and $\frac{SE}{4}$ Sec. 2 and Delete $\frac{1}{2}$ and $\frac{SE}{4}$ Sec. 14 (R-8170-0, 11-27-98)

Ext: All Sec. 3 (R-11534, 2-8-01)

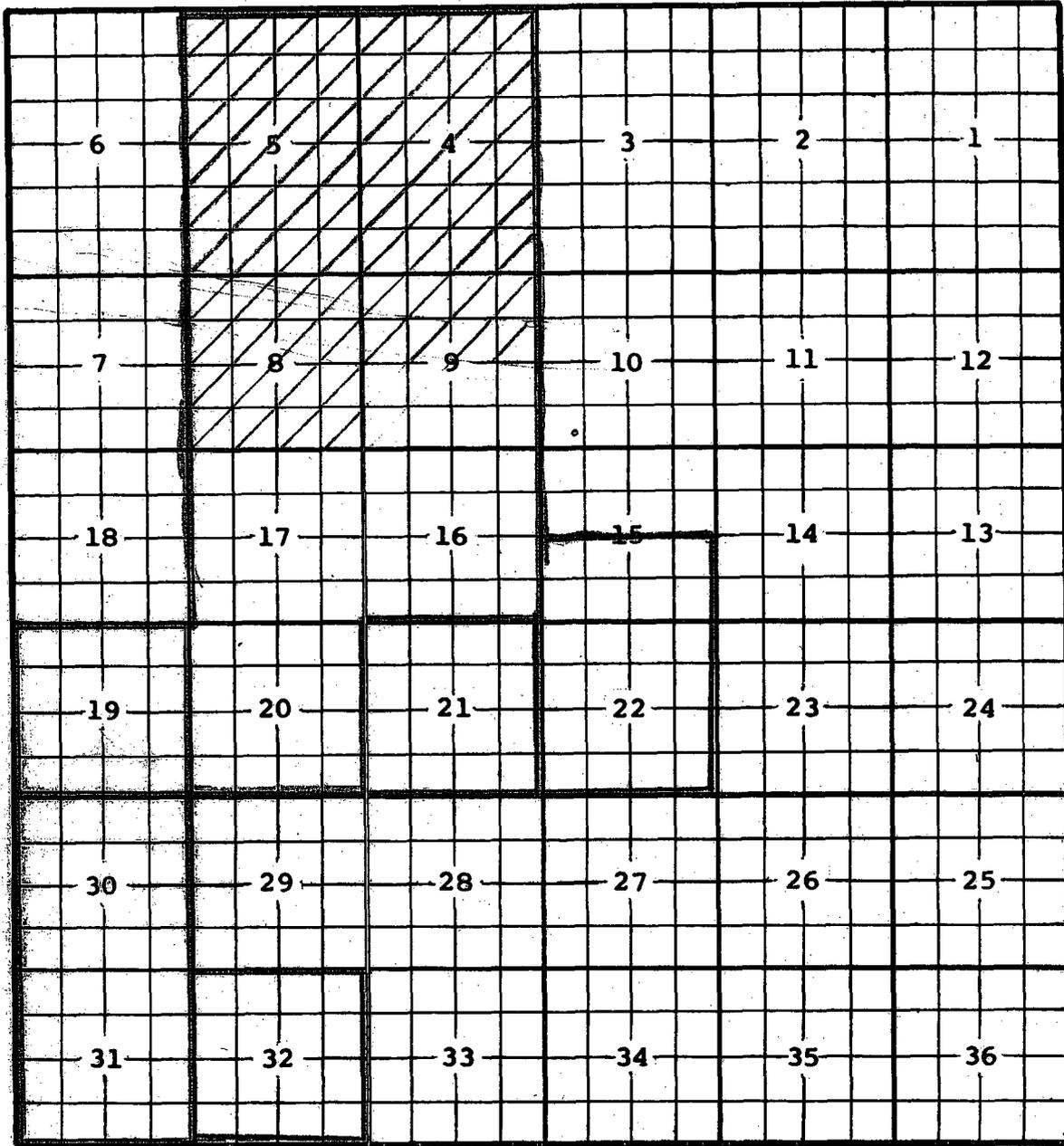
COUNTY Eddy

POOL Indian Basin - Morrow Gas

TOWNSHIP 21 South

RANGE 24 East

NMPM



Ext: All Sec 19 (R-2726, 7-1-64) - All Sec 30 & 31 (R-2911, 6-1-65)

- All Secs 4, 5, 8, 9, 16, 17, & 20 (R-2752, 6-1-69)

Deletion: All Secs 4 & 5 (R-5162, 3-1-76)

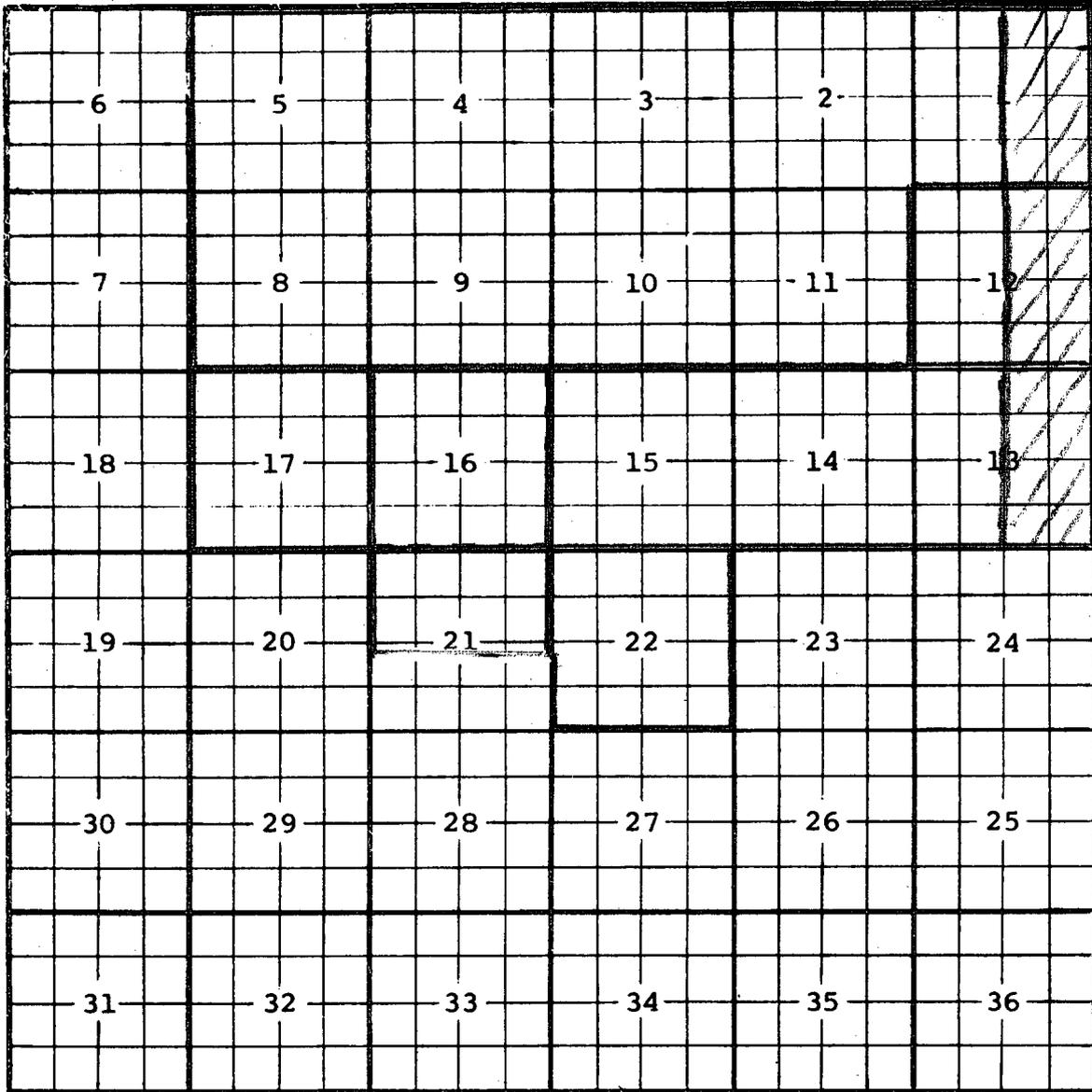
Deletion: $\frac{1}{2}$ Sec 9 (R-5891, 1-1-79) Deletion: All Sec 8 (R-5885, 12-31-78)

Ext: All Sec. 32 (R-8391, 1-22-87) EXT: All Sec 21 (R-8969, 8-1-89)

Ext: $\frac{1}{2}$ Sec. 15, All Sec. 22 (R-9963, 9-20-93)

COUNTY Eddy POOL Indian Basin - Upper Pennsylvanian Gas

TOWNSHIP 22 South RANGE 23 East NMFM



Ext: All Sec. 1 thru 5; All Sec. 8 thru 11 (R-2911, 6-1-65) - All Sec. 12 & 16 (R-3030, 2-1-66)
- All Secs. 13, 14 & 15 (R-3051, 4-1-66) - All Sec. 17 (R-3104, 9-1-66) -
- $\frac{N}{2} \times \frac{N}{2} \times \frac{N}{2} \times \frac{S}{2}$ Sec. 21 (R-4014, 9-1-70) - All Sec. 22 (R-4258, 3-1-72)
Revoke $\frac{E}{2}$ Sec. 1, $\frac{E}{2}$ Sec. 12, $\frac{E}{2}$ Sec. 13 (R-4922-A, 12-7-98)

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2750
Order No. R-2441
NOMENCLATURE

APPLICATION OF RALPH LOWE
TO CREATE A NEW POOL FOR
MORROW GAS PRODUCTION AND
FOR SPECIAL POOL RULES,
EDDY COUNTY, NEW MEXICO.

*Also see
R-2441-A*

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 6, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of February, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Ralph Lowe, seeks the creation of a new gas pool for Morrow production and the promulgation of temporary special rules and regulations governing said pool, including a provision for 640-acre spacing units.

(3) That a new gas pool for Morrow production should be created and designated the Indian Basin-Morrow Gas Pool. This pool was discovered by the Ralph Lowe Indian Basin Well No. 1, located in Unit E of Section 23, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico. The top of the perforations in the Morrow formation is at 9039 feet.

(4) That temporary special rules and regulations establishing 640-acre spacing units should be promulgated for the subject pool in order to prevent the possibility of economic loss resulting from the drilling of unnecessary wells and in order to allow

the operators in the subject pool to gather information concerning the reservoir characteristics of the pool.

(5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That special rules and regulations should be established for a temporary period to expire one year from the date that a pipeline connection is first obtained for a well in the pool; that during this temporary period all operators in the subject pool should gather all available information relative to drainage and recoverable reserves.

(7) That this case should be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Morrow Gas Pool, at which time the operators in the subject pool should appear and show cause why the Indian Basin-Morrow Gas Pool should not be developed on 160-acre spacing units.

(8) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Morrow Gas Pool should notify the Commission in writing of such fact, and that the Commission should thereupon issue a supplemental order designating an exact date for reopening this case.

IT IS THEREFORE ORDERED:

(1) That a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production is hereby created and designated the Indian Basin-Morrow Gas Pool, consisting of the following-described area:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 22: All

Section 23: All

(2) That Special Rules and Regulations for the Indian Basin-Morrow Gas Pool are hereby promulgated as follows, effective March 1, 1963.

SPECIAL RULES AND REGULATIONS
FOR THE
INDIAN BASIN-MORROW GAS POOL

RULE 1. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool or in the Morrow formation within one mile of the Indian Basin-Morrow Gas Pool, and not nearer to or within the limits of another designated Morrow pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be located on a standard unit containing 640 acres, more or less, consisting of a single governmental section.

RULE 3. The Secretary-Director 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 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 section and contains less acreage than a standard unit.
- (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 Secretary-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 Secretary-Director has received the application.

RULE 4. Each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and 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 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 Secretary-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 unorthodox location within 20 days after the Secretary-Director has received the application.

IT IS FURTHER ORDERED:

(1) That any well presently drilling to or completed in the Morrow formation within the Indian Basin-Morrow Gas Pool or within one mile of the Indian Basin-Morrow Gas Pool that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of Rule 4. The operator of any such well shall notify the Artesia District Office in writing of the name and location of the well on or before March 1, 1963.

(2) That any operator desiring to dedicate 640 acres to a well presently drilling to or completed in the Indian Basin-Morrow Gas Pool shall file a new Form C-128 with the Commission on or before March 1, 1963.

(3) That this case shall be reopened at an examiner hearing one year from the date that a pipeline connection is first obtained for a well in the Indian Basin-Morrow Gas Pool, at which time the operators in the subject pool may appear and show cause why the Indian Basin-Morrow Gas Pool should not be developed on 160-acre spacing units.

(4) That the first operator to obtain a pipeline connection for a well in the Indian Basin-Morrow Gas Pool shall notify the Commission in writing of such fact, and that the Commission will thereupon issue a supplemental order designating an exact date for reopening this case.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2750
Order No. R-2441-A
APPLICATION OF RALPH LOWE
TO CREATE A NEW POOL FOR
MORROW GAS PRODUCTION AND
FOR SPECIAL POOL RULES,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 8, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 13th day of February, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That by Order No. R-2441, dated February 28, 1963, Special Rules and Regulations were promulgated for the Indian Basin-Morrow Gas Pool, Eddy County, New Mexico, for a period of one year from the date of first pipeline connection.
- (3) That pursuant to the provisions of Order No. R-2441, this case was reopened to allow the operators in the subject pool to appear and show cause why the Indian Basin-Morrow Gas Pool should not be developed on 320-acre spacing units.
- (4) That the evidence establishes that one well in the Indian Basin-Morrow Gas Pool can efficiently and economically drain and develop 640 acres.

CASE No. 2750

Order No. R-2441-A

(5) That the Special Rules and Regulations promulgated by Order No. R-2441 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the gas in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-2441 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the Indian Basin-Morrow Gas Pool, promulgated by Order No. R-2441, are hereby continued in full force and effect until further order of the Commission.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

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. 11512
ORDER NOS. R-8170-O-1
AND
R-2441-B

APPLICATION OF MARATHON OIL COMPANY, KERR-McGEE CORPORATION, AND
SANTA FE ENERGY RESOURCES, INC. TO TERMINATE GAS PRORATIONING, TO
"INFILL" DRILL, AND TO AMEND THE SPECIAL RULES AND REGULATIONS FOR
THE INDIAN BASIN-MORROW GAS POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 2, 1996, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 31st day of July, 1996, the Division Director, having considered 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 Division Order No. R-2441, dated February 28, 1963, the Indian Basin-Morrow Gas Pool was created and designated as a gas pool for the production of gas from the Morrow formation underlying all of Sections 22 and 23, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico. Said order further provided for 640-acre spacing units with well location requirements such that each well completed or recompleted in the Indian Basin-Morrow Gas Pool shall be no closer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any quarter-quarter section or subdivision inner boundary.
- (3) Gas production allocation or gas prorationing based on acreage alone was instituted in the Indian Basin-Morrow Gas Pool by Division Order No. R-1670-F, issued in Case 3237 and dated May 6, 1965. Both the "*Special Rules and Regulations for the Indian Basin-Morrow Gas Pool*" that were originally adopted by said Order No. R-2441 and the subsequent prorationing under R-1670-F were later recodified and combined in Division Order No. R-8170, as amended. Because this pool is "prorated", an infill or second well on an individual 640-acre gas spacing and proration unit is acceptable; further any allowable issued to such a unit can usually be produced

from both wells in any proportion (see Division Memorandums dated July 27, 1988 and August 3, 1990).

(4) The reasons stated in said Order No. R-1670-F for instituting gas prorationing in this pool in the year 1963 were as follows:

- (a) there were a total of eight wells completed in the Indian Basin-Morrow Gas Pool; however no Morrow gas had been transported from these wells because no transportation facilities to this area were in existence;
- (b) there existed a market demand for this production and two purchasers were planning construction of gas transportation facilities to these wells; and,
- (c) the wells that were completed at the time were capable of producing in excess of the reasonable market demand for gas from the pool and were capable of producing in excess of the gas transportation facilities to be constructed.

THEREFORE, production from the Indian Basin-Morrow Gas Pool was restricted to reasonable market demand and the capacity of the gas transportation facilities to be constructed.

(5) By Division Order R-8170-O, dated November 27, 1995, entered in Case 11333, the Division granted, in part, an application of Marathon Oil Company ("Marathon") to expand the nearby and unprorated Cemetery-Morrow Gas Pool and to contract the Indian Basin-Morrow Gas Pool because:

- (a) the Morrow formation underlying the area encompassing both the Indian Basin and Cemetery Morrow Gas Pools is approximately 1600 feet below the Cisco/Canyon formation or the South Dagger Draw-Upper Pennsylvanian Associated Pool, in which and is now often treated as a secondary objective which can be economically explored in conjunction with the drilling or deepening of a well for production from the primary objective--the Cisco/Canyon formation or South Dagger Draw-Upper Pennsylvanian Associated Pool;
- (b) the Morrow wells in both the Indian Basin-Morrow Gas Pool and the Cemetery-Morrow Gas Pool will drain no more than 320 acres;
- (c) there is no physical or impermeable barrier within the Morrow interval separating the Cemetery and the Indian Basin Morrow Gas Pools indicating that the Morrow formation constitutes one single common source of supply ("reservoir") in this particular area; and,

- (d) in order to afford an opportunity to drill a well to test both the Cisco/Canyon formation of the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Morrow formation, it is necessary to have the Morrow formation spaced on the same 320-acre standard spacing pattern as established for the South Dagger Draw-Upper Pennsylvanian Associated Pool:

with the Division finding that many of Marathon's objectives may be obtained in a manner consistent with Division practice by the following:

- (i) contracting a portion of the Indian Basin Morrow Gas Pool; and,
- (ii) by declaring that the special rules and regulations for the Indian Basin-Morrow Gas Pool rules shall not apply beyond its current boundary.

(6) With amendments to these orders the horizontal limits of said pool have been adjusted from time to time and currently comprise the following described area in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 2:	All
Sections 9 and 10:	All
Section 11:	W/2
Section 14:	SW//4
Section 15:	All
Sections 22 through 25:	All
Section 36:	All

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Section 9:	S/2
Section 15:	S/2
Sections 16 and 17:	All
Sections 19 through 22:	All
Sections 30 through 32:	All

(7) At this time the applicants in this matter, Marathon Oil Company, Kerr-McGee Corporation ("Kerr-McGee"), and Santa Fe Energy Resources, Inc., operators and working interest owners in the aforementioned Indian Basin-Morrow Gas Pool, seek (i) to terminate gas prorationing for said pool, to cancel all over and under production, (ii) authority for the infill drilling of a second well within a standard 640-acre gas spacing unit, and (iii) to amend the special rules and regulations to provide for standard well locations not closer than 660 feet to the outer boundary of a spacing unit for said pool.

(8) Recent gas prorationing activity in the subject pool includes:

(a) On August 19, 1993, the New Mexico Oil Conservation Commission ("Commission") held a "gas allowable hearing" in which Kerr-McGee sought but was denied an increase in gas allowable for the Pool (see Division Order No. R-9960);

(b) Since then, the Commission has adopted a gas allowable for this pool which has resulted in the following non-marginal pool allowable per month being assigned to usually just one single non-marginal well in the pool;

Oct 93-Mar 94: 16,947 MCF/Mo.
Apr 94-Sep 94: 15,469 MCF/Mo.
Oct 94-Apr-95: 16,000 MCF/Mo.
Apr 95-Sep 95: 16,000 MCF/Mo.
Oct 95-Mar 96: 22,304 MCF/Mo.
Apr 96-Oct 96: 15,674 MCF/Mo.

(c) In August, 1995, and again in March, 1996 Marathon balloted all operators in the subject pool and determined that no operator opposed terminating prorationing for the Indian Basin-Morrow Gas Pool; and,

(d) On February 15, 1996 the Commission held its "Gas Allowable Hearing" at which Marathon and Kerr-McGee advised the Commission that they were seeking to terminate prorationing in this pool.

(9) At the time of the hearing in this case, evidence was presented that Gas Prorationing for the Indian Basin-Morrow Gas Pool should now be terminated at this time for reasons which include:

(a) Since the institution of prorationing for this pool in 1963, there has been substantial changes in the pool production, development, gas purchasing and marketing practices and other factors affecting the oil and gas industry which make prorationing of the product from this pool no longer necessary;

(b) Market demand for gas currently exceeds deliverability from the pool and for its expected remaining life the total deliverability of the wells in the pool is not expected to exceed market demand for gas produced from the pool;

(c) Currently there are 9 producing wells in the pool with 5 wells classified as marginal and 4 wells classified as non-marginal;

- (d) 100 % of the operators of both marginal and non-marginal wells in the pool support the termination of prorationing in the pool;
- (e) There are no wells in the pool which are underproduced because of a lack of market for the gas from wells;
- (f) Geologic and engineering calculations establish that the higher capacity wells are draining less than 320 acres and therefore the termination of prorationing for the pool will not give the non-marginal wells any unfair advantage over the marginal wells;
- (g) Termination of prorationing for the pool will result in increased ultimate recovery from the pool thereby preventing waste;
- (h) Production of the non-marginal wells is currently being restricted by the proration system assignment of allowable for those wells and not by a lack of market for that production;
- (i) The Division's practice of using the pool's production for the prior 6-month proration period as the main indication of actual market demand by which it sets allowable has not kept pool production in line with actual market demand because when allowable levels and well capabilities are such that a well attempting to meet its market demand hits the six times limit in two months or less, it will be curtailed by the time the allowable has a chance to reflect the increased market demand;
- (j) The current proration system for the pool lacks the flexibility to resolve the problem by simply producing the non-marginal wells at rates in excess of the current allowable and causing the future allowable to be adjusted upward to reflect actual market demand and now most non-marginal wells are at least six times overproduced;
- (k) The current allowable of 688 MCFPD is too low and does not accurately reflect the actual market demand for gas from the pool;
- (l) While the current Commission has granted increases in allowable for certain prorated pools in Southeastern New Mexico, simply assigning more allowable to the pool would provide only temporary and partial incentives for additional production, drilling and workover activities. Such adjustments will not provide a long term reliable solution because the Operators are not assured that such practice will continue and the opportunity to produce wells without allowable restrictions provides an economic incentive necessary to encourage further drilling in the pool;

- (m) Because the pipeline companies in the pool which used to be the purchasers of a substantial volume of gas produced are now transporters and not purchasers, the potential for non-ratable takes by the pipelines no longer exists and proration in this pool is no longer justified on that basis;
- (n) Because there is only one non-standard proration unit in the pool and its well no longer produces, there exists no basis for continuing prorationing of the pool based upon the advantage a non-standard sized proration and spacing unit might theoretically have over standard sized spacing units;
- (o) Because there are no spacing units that currently have producing more than one well per 320 acres, prorationing can be terminated and spacing maintained at 640 acres with authorization for a second "infill" well;
- (q) All current unorthodox well locations are for wells which are no longer producing in this pool and thus is not a basis for continuing proration for the pool;
- (r) Cancellation of over and under production from any gas spacing and proration unit will not create the potential for drainage which is not equalized by counter-drainage;
- (s) Termination of prorationing will not cause the non-marginal wells if allowed to produce at capacity to satisfy more than their share of the market and thereby displace or deny a market for the marginal wells; and
- (t) Termination of prorationing will not cause the high capacity wells, if allowed to produce at capacity, to take more than their share of the remaining gas reserves to the disadvantage of the marginal wells' gas proration units nor will this cause marginal wells to be prematurely abandoned.

(10) At the time of the hearing in this case, evidence was presented that authorization of infill drilling of a second well on a standard 640-acre gas spacing and proration unit and the amendment of the current special pool rules for this pool to provide for standard gas well locations not closer than 660 feet to the outer boundary of a spacing unit are necessary because:

- (a) Production from the Morrow formation in this area is from many separate stringers which vary greatly in areal extent, porosity, and thickness;
- (b) These stringers are not continuous across the pool; and,
- (c) There are recoverable gas reserves underlying each of the spacing units within this pool which might not otherwise be recovered unless greater flexibility is provided for standard well locations and provision is made

for increasing the density to greater than one well per 640-acre spacing unit.

(11) However, such a request for greater flexibility for well locations in this instance causes an inconsistency along the Pool's boundary lines where spacing and well location requirements are governed by **Rule 104** of the "*New Mexico Oil Conservation Division General Rules and Regulations*" which provides for 320-acre spacing for gas wells in southeast New Mexico (Lea, Chaves, Eddy, and Roosevelt Counties) of Pennsylvanian age or older with wells to be no closer than 660 feet to the nearest side boundary (one of the outer boundaries running lengthwise to the tract's greatest overall dimensions) of the dedicated tract nor closer than 1650 feet from the nearest end boundary (one of the outer boundaries perpendicular to a side boundary and closing the tract across its least overall dimension) nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. Such inconsistency could result in an offsetting operator of Morrow interest outside of the Indian Basin-Morrow Gas Pool unable to adequately counter-drain a well that is legally offsetting his acreage by a distance of 660 feet with a legal well a minimum distance of 1650 feet from the common boundary line separating the two spacing units. Therefore, a buffer-zone of one-half mile should extend beyond the Indian Basin-Morrow Gas Pool whereby a well could be drilled on a standard 320-acre gas spacing and proration unit:

- (a) no closer than 660 feet to the nearest side boundary (as defined above) of the 320 acres therein dedicated to said well;
- (b) nor closer than 660 feet from the nearest end boundary (as defined above) of said dedicated tract;
- (c) nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.

(12) No other operator and/or interest owner appeared at the hearing in opposition to the application.

(13) Approval of this application will afford the applicants and all affected interest owners the opportunity to produce their just and equitable share of the hydrocarbons in these Morrow formations and will otherwise prevent waste and protect correlative rights.

(14) Approval of Marathon's request will allow the interest owners the opportunity to economically recover their share of the oil and gas in the subject pool, will not reduce ultimate recovery from the subject pool, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Marathon Oil Company ("Marathon"), Kerr-McGee Corporation ("Kerr-McGee"), and Santa Fe Energy Resources, Inc. seeking an order terminating gas prorationing in the Indian Basin-Morrow Gas Pool in portions of Township 21 South, Ranges 23 and 24 East, NMPM, Eddy County, New Mexico is hereby granted effective August 1, 1996.

IT IS FURTHER ORDERED THAT:

(2) Effective August 1, 1996, all allowable established for the Indian Basin-Morrow Gas Pool, including any accumulated over and under production shall be canceled and considered null, void, and of no effect whatsoever.

FURTHER:

(3) For reasons of clarification all previous and current rules and regulations governing the Indian Basin-Morrow Gas pool in Division Order Nos. R-2441, R-2441-A, R-1650, as amended, and R-8170, as amended, shall be superseded by this order and a new set of procedures entitled "*Special Rules and Regulations for the Indian Basin-Morrow Gas Pool*" shall be recodified at this time to take the place of any and all previous sets of pool rules.

(4) The following set of rules and regulations for the Indian Basin-Morrow Gas Pool are hereby reestablished as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE
INDIAN BASIN-MORROW GAS POOL**

RULE 1. Confinement of the special rules governing the Indian Basin-Morrow Gas Pool shall apply only to such lands as shall from time to time lie within the horizontal limits of said pool and each well completed in or recompleted within said 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 640 acres, more or less, substantially in the form of a square, which is a governmental section being a legal subdivision of the United States Public Lands Survey.

RULE 3. The supervisor of the Artesia District Office of the Division shall have authority to approve non-standard units without notice when the unorthodox size or shape is due to a variation in the legal subdivision of the United States Public Lands Survey and consists of an entire governmental section and the non-standard unit is no less than 75% nor more than 125% of a standard unit;

RULE 4. 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 filed for a non-standard unit consisting of less than 640 acres and when the following facts exist and the following provisions are complied with:

- (a) the non-standard unit consists of quarter-quarter sections and/or lots that are contiguous by a common bordering side;
- (b) the non-standard unit lies wholly within a single governmental section;
- (c) the applicant presents written consent in the form of waivers from;

- (I) all offset operators to the section in which the non-standard gas unit is located; and,

- (II) from all working interest owners in the section in which the non-standard unit is situated and which acreage is not included in the non-standard unit;

- (d) in lieu of sub-part (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid parties to be notified were notified by registered or certified mail of his intent to form such non-standard unit, the Division Director may approve the application if no such notified party has entered an objection to the formation of such non-standard unit within 30 days after the Division Director has received the application;

RULE 5(a). The initial well within a spacing unit shall be located no closer than 660 feet to the outer boundary of the proration unit nor closer than 130 feet to any governmental quarter-quarter section line or subdivision inner boundary;

RULE 5(b). The infill well or second well within a spacing unit shall be located in a quarter section of the existing spacing unit not containing a Morrow gas well and shall be located with respect to the spacing unit boundaries as described in the preceding sub-paragraph above;

RULE 6. The Division Director may grant an exception to the requirements of Rule 5 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions. 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 20 days after the Director has received the application;

(5) Any other wells presently drilling to or completed in the Indian Basin-Morrow Gas Pool are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.

(4) Pursuant to Paragraph A of Section 70-2-18 NMSA (1978), existing gas wells in the Indian Basin-Morrow Gas Pool shall have dedicated thereto 640 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 640 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 being shut-in.

IT IS FURTHER ORDERED THAT:

(6) A buffer zone extending one-half mile beyond the Indian Basin-Morrow Gas Pool boundary whereby a Morrow gas well developed on 320-acre spacing can be drilled on a standard 320-acre gas spacing and proration unit that is:

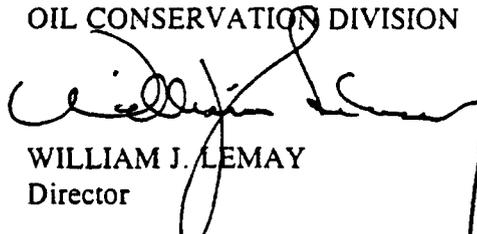
- (a) no closer than 660 feet to the nearest side boundary (as defined above) of the 320 acres therein dedicated to said well;
- (b) nor closer than 660 feet from the nearest end boundary (as defined above) of said dedicated tract;
- (c) nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.

(7) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

Case No. 11512
Order Nos. R-8170-O-1/R-2441-B
Page 11

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

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

CASE NO. 11512

APPLICATION OF MARATHON OIL COMPANY, KERR-McGEE CORPORATION, AND SANTA FE ENERGY RESOURCES, INC. TO TERMINATE GAS PRORATIONING, TO "INFILL" DRILL, AND TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-MORROW GAS POOL, EDDY COUNTY, NEW MEXICO.

ORDER NOS. R-8170-O-2
AND
R-2441-C

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the New Mexico Oil Conservation Division ("Division") that Order Nos. R-8170-O-1/R-2441-B, issued in Case No. 11512 and dated July 31, 1996, does not correctly state the intended order of the Division.

IT IS THEREFORE ORDERED THAT:

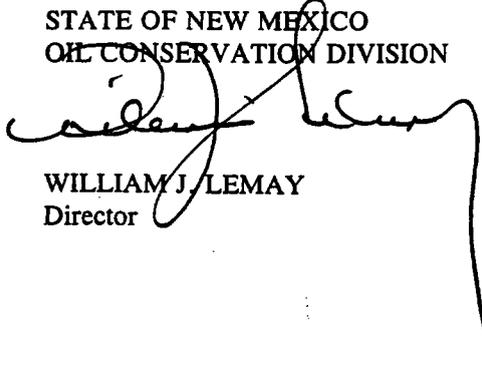
(1) RULE 5(a) on page 9 of Decretory Paragraph No. (4) of said Order Nos. R-8170-O-1/R-2441-B, be and the same, is hereby amended to read in its entirety as follows:

" RULE 5(a). The initial well within a spacing unit shall be located no closer than 660 feet to the outer boundary of the proration unit nor closer than 330 feet to any governmental quarter-quarter section line or subdivision inner boundary;"

(2) The corrections set forth in this order be entered nunc pro tunc as of July 31, 1996.

DONE at Santa Fe, New Mexico, on this 15th day of August, 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

SEAL

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. 10748
Order No. R-9922

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.

See Also Order Nos.

R-9922-A

R-9922-B

R-9922-C

R-9922-D

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 6th 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) The applicant, Yates Petroleum Corporation, seeks the creation of a new associated pool for the production of oil and gas from the Upper Pennsylvanian formation comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(3) The applicant further seeks the promulgation of temporary special rules and regulations including 320-acre oil and gas spacing, designated well location requirements, a limit of no more than one well per quarter section, a special depth bracket allowable of 1400 barrels of oil per day per standard proration unit and an administrative procedure for approval of unorthodox well locations and non-standard spacing and proration units.

(4) At the time of the hearing the applicant requested that the portion of its request for an administrative procedure for obtaining approval for unorthodox well locations and non-standard spacing and proration units be dismissed.

NOMENCLATURE

CASE No. 10748

Order No. R-9922

Page -2-

(5) Nearburg Producing Company (Nearburg), a leasehold operator in this area, appeared at the hearing in support of Yates' application with the exception of the request to limit the well density to one well per quarter section. In addition, Santa Fe Energy Operating Partners, L.P. and Marathon Oil Company appeared through counsel at the hearing but did not present evidence or testimony nor did they protest the application.

(6) On October 15, 1992 the applicant commenced re-entry operations on its Hickory "ALV" Federal Well No. 1 (previously the Pan American Petroleum Corporation I. T. Hollowell "A" USA No. 1) located 1650 feet from the North and West lines (Unit F) of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico. The subject well has been completed in the Canyon formation through the perforated interval from approximately 8,139 feet to 8,259 feet.

(7) According to applicant's evidence and testimony, the Hickory "ALV" Federal Well No. 1 was tested in the Canyon formation on June 15, 1992 at a rate of 408 BOPD, 1,197 BWPD and 511 MCFGD.

(8) The subject well is located approximately 10 miles south of the South Dagger Draw-Upper Pennsylvanian Associated Pool and directly adjacent to the Indian Basin-Upper Pennsylvanian Gas Pool.

(9) The applicant's geologic evidence and testimony in this case indicates that:

a) the Hickory "ALV" Federal Well No. 1 is producing from the same Dolomite section, albeit structurally lower, being produced in the Indian Basin-Upper Pennsylvanian Gas Pool;

b) the Dolomite section in the Hickory "ALV" Federal Well No. 1 exhibits similar geologic characteristics to the Dolomite section being produced in the North and South Dagger Draw-Upper Pennsylvanian Pools;

c) the subject reservoir will likely ultimately be determined to be a separate "oil leg" of the Indian Basin-Upper Pennsylvanian Gas Pool or an extension of the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(10) The engineering evidence and testimony in this case indicates that the oil being produced in the Hickory "ALV" Federal Well No. 1, having a gravity of approximately 42 degrees, is similar to that being produced in the North and South Dagger Draw-Upper Pennsylvanian Pools. The gravity of oil being produced in the Indian Basin-Upper Pennsylvanian Gas Pool ranges from 58-60 degrees.

NOMENCLATURE

CASE No. 10748

Order No. R-9922

Page -3-

(11) The evidence currently available regarding the subject reservoir indicates that a new associated pool for the production of oil and gas from the Upper Pennsylvanian formation should be created and designated the Indian Basin-Upper Pennsylvanian Associated Pool, with horizontal limits comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(12) The applicant contends that the similarities between the subject reservoir and the North and South Dagger Draw-Upper Pennsylvanian Pools are sufficient to justify the promulgation of special rules and regulations similar to those currently governing these pools.

(13) The North Dagger Draw-Upper Pennsylvanian Pool is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-4691, as amended, and Order No. R-5565, which require 160-acre spacing with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, an oil allowable of 700 barrels per day, and a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(14) The South Dagger Draw-Upper Pennsylvanian Associated Pool is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-5353, as amended, which require 320-acre oil or gas spacing with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, an oil allowable of 1400 barrels per day, and a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil.

(15) The Special Rules and Regulations for the North and South Dagger Draw-Upper Pennsylvanian Pools do not prohibit the drilling of more than one well on a standard proration unit.

(16) In support of its request to limit the well density to one well per quarter section, the applicant testified that the Hickory "ALV" Federal Well No. 1, based upon analogies to wells in the South Dagger Draw-Upper Pennsylvanian Associated Pool, should be capable of draining an area of approximately 80-100 acres.

(17) Without a limitation on well density, the South Dagger Draw-Upper Pennsylvanian Associated Pool has been developed on 40-acre well spacing, which, according to the applicant, is too dense for this type of reservoir.

NOMENCLATURE

CASE No. 10748

Order No. R-9922

Page -4-

(18) Nearburg requested that the proposed pool rules contain a rule similar to Rule No. 22 of the Special Rules and Regulations for the South Dagger Draw-Upper Pennsylvanian Associated Pool which states that all or part of the 1400 BOPD allowable may be produced by a single well or by two or more wells on a standard proration unit.

(19) Nearburg has the opportunity, during the period when temporary special rules and regulations are in place for the subject reservoir, to acquire drainage data and reopen this case in order to present evidence and testimony to support its request.

(20) In the absence of compelling evidence to support denser well spacing, and in order to prevent the drilling of unnecessary wells, the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should provide for 320-acre well spacing with no more than two wells per standard unit.

(21) The applicant requested an oil allowable of 1400 barrels per day per standard proration unit and a gas-oil ratio limitation of 2,000 cubic feet of gas per barrel of oil. Applicant's requested oil allowable is based upon:

a) a similar oil allowable currently in effect for both the North and South Dagger Draw-Upper Pennsylvanian Pools, and,

b) a gas well in the subject reservoir being able to effectively compete with gas wells in the Indian Basin-Upper Pennsylvanian Gas Pool, whose gas allowable has stabilized, according to the applicant, at approximately 5.5 MMCFGD.

(22) The oil allowable currently in effect for the North and South Dagger Draw-Upper Pennsylvanian Pools was established by the Division, at least in part, in order to provide an incentive to operators to drill additional wells. In addition, there is no evidence at the current time to indicate that the proposed allowable will not cause excessive waste of reservoir energy, thereby resulting in decreased ultimate oil recovery.

(23) The Indian Basin-Upper Pennsylvanian Associated Pool should be assigned an oil allowable equal to the depth bracket allowable of 470 barrels of oil per day per 160-acre tract, or 940 BOPD.

(24) Temporary Special Rules and Regulations should be promulgated for the Indian Basin-Upper Pennsylvanian Associated Pool for a period of eighteen months. These rules should provide for 320-acre oil and gas spacing and proration units, a limitation of one well per quarter section, designated well location requirements, an oil allowable of 940 barrels of oil per day per standard proration unit and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

NOMENCLATURE

CASE No. 10748

Order No. R-9922

Page -5-

(25) This case should be reopened at an examiner hearing in January, 1995 at which time the operators in the subject pool should be prepared to appear and present evidence and testimony regarding the nature of the subject reservoir, the appropriate well spacing, and an appropriate oil allowable.

IT IS THEREFORE ORDERED THAT:

(1) A new associated pool for the production of oil and gas from the Upper Pennsylvanian formation is hereby created and designated the Indian Basin-Upper Pennsylvanian Associated Pool with horizontal limits comprising the W/2 of Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(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 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 the special rules and regulations shall apply.

(3) Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool 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 comprise 320 acres. A standard gas proration unit shall comprise 320 acres.

RULE 2. (b) Each well shall be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line 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 940 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 940 barrels per day.

NOMENCLATURE

CASE No. 10748

Order No. R-9922

Page -6-

IT IS FURTHER ORDERED THAT:

(4) The location of all wells presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool or in the Upper Pennsylvanian formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within 30 days from the date of this order.

(5) Pursuant to Paragraph A of Section 70-2-18, N.M.S.A. 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil and gas wells in the Indian Basin-Upper Pennsylvanian Associated Pool shall have dedicated thereto 320 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.

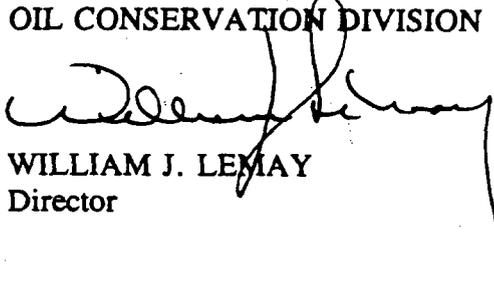
Failure to file new Forms C-102 with the Division dedicating 320 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable until a non-standard spacing unit has been approved and, subject to said 60-day limitation, each well presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool or in its corresponding vertical limits, or within one mile thereof, shall receive no more than one-fourth of a standard allowable for said pool.

(6) This case shall be reopened at an examiner hearing in January, 1995, at which time the operators in the subject pool may appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool promulgated herein should not be rescinded.

(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


WILLIAM J. LEMAY
Director

S E A L

*See Also Order
Nos. R-9922
R-9922-B
R-9922-C
R-9922-D*

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF CASE NO. 10748 BEING REOPENED UPON APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND THE SPACING REQUIREMENTS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL, ESTABLISHED BY ORDER NO. R-9922, EDDY COUNTY, NEW MEXICO.

CASE NO. 10748
ORDER NO. R-9922-A

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on December 16, 1993, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 22nd day of December, 1993, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

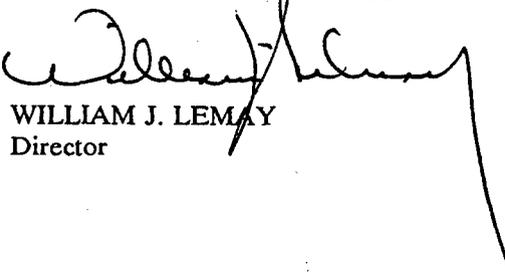
- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) Yates Petroleum Corporation made application to reopen Case No. 10748 to amend the spacing requirements for the Indian Basin-Upper Pennsylvanian Associated Pool established by Order No. R-9922, Eddy County, New Mexico.
- (3) By letter dated December 10, 1993, the applicant requested this case be dismissed.
- (4) The applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED THAT:

Case No. 10748 is hereby dismissed.

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

**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 (Reopened)
Order No. R-9922-B**

**IN THE MATTER OF CASE NO. 10748
BEING REOPENED PURSUANT TO THE
PROVISIONS OF DIVISION ORDER NO.
R-9922, WHICH ORDER PROMULGATED
TEMPORARY SPECIAL RULES AND
REGULATIONS FOR THE INDIAN BASIN-
UPPER PENNSYLVANIAN ASSOCIATED
POOL, EDDY COUNTY, NEW MEXICO.**

*See Also Order Nos.
R-9922
R-9922-A
R-9922-C
R-9922-D*

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on February 2, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of February, 1995, 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-9922 issued in Case No. 10748 on July 6, 1993, the Division, upon application of Yates Petroleum Corporation, created the Indian Basin-Upper Pennsylvanian Associated Pool in Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations for said pool including the establishment of standard 320-acre oil or gas spacing and proration units, designated well locations, and a special depth bracket allowable of 940 barrels of oil per day.

(3) Pursuant to the provisions of Order No. R-9922, this case was reopened to allow the operators in the subject pool to appear and present evidence and testimony to show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(4) Yates Petroleum Corporation, Marathon Oil Company, Nearburg Producing Company and Santa Fe Energy Operating Partners, L.P. appeared at the hearing through legal counsel.

(5) Yates Petroleum Corporation requested at the hearing that the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool remain in effect for an additional twelve month period.

(6) According to Yates' statement, the conductance of an environmental audit during the past eighteen months has precluded developmental drilling within the subject pool.

(7) All operators represented at the hearing were in agreement with Yates' request.

(8) Approval of Yates' request will allow the operators in the subject pool additional time to gather reservoir data pertinent to this case.

(9) No other operator and/or interest owner appeared at the hearing in opposition to Yates' request.

(10) The Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should remain in effect for an additional twelve month period.

(11) This case should be reopened at an Examiner hearing in January, 1996, at which time the operators in the subject pool should be prepared to appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

IT IS THEREFORE ORDERED THAT:

(1) The Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool are hereby continued in full force and effect for an additional twelve month period.

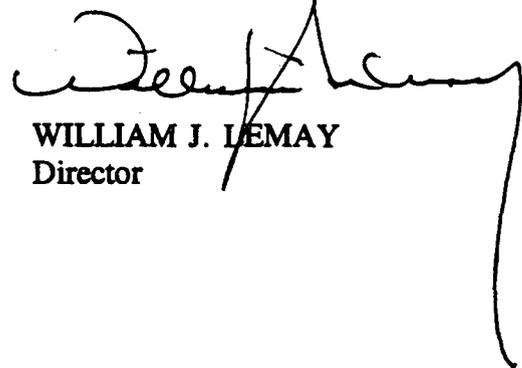
Case No. 10748 (Reopened)
Order No. R-9922-B
Page -3-

(2) This case shall be reopened at an Examiner hearing in January, 1996, at which time the operators in the subject pool shall be prepared to appear and show cause why the Temporary Special Rules and Regulations for the Indian Basin- Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(3) 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



WILLIAM J. LEMAY
Director

S E A L

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:

See Also Order Nos.

R-9922

R-9922-A

R-9922-B

R-9922-D

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

IN THE MATTER OF CASE NO. 10748 BEING REOPENED PURSUANT TO THE PROVISIONS OF DIVISION ORDER NO. R-9922-B, WHICH ORDER CONTINUED IN EFFECT THE TEMPORARY SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL AS PROMULGATED BY DIVISION ORDER NO. R-9922, AS AMENDED, EDDY COUNTY, NEW MEXICO.

APPLICATION OF YATES PETROLEUM CORPORATION TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 21, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 14th day of May, 1996, 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) Division Case Nos. 10748 (Reopened) and Case No. 11484 were consolidated at the time of the hearing for the purpose of testimony, and inasmuch as both cases concern the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, one order should be entered for both cases.

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

Page -2-

(3) By Order No. R-9922 issued in Case No. 10748 on July 6, 1993, the Division, upon application of Yates Petroleum Corporation (Yates), created the Indian Basin-Upper Pennsylvanian Associated Pool in Section 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations for said pool including the establishment of standard 320-acre oil or gas spacing and proration units, designated well locations, and a special depth bracket allowable of 940 barrels of oil per day.

(4) Pursuant to the provisions of Order No. R-9922, Case No. 10748 was reopened and heard in February, 1995, to consider permanently adopting the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool. At the request of Yates and for good cause shown, the subject temporary rules were continued in full force and effect for an additional twelve month period.

(5) Pursuant to the provisions of Order No. R-9922-B, this case is being reopened at the present time to allow the operators in the subject pool to appear and present evidence and testimony to show cause why the Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool should not be rescinded and the pool developed on statewide rules and regulations.

(6) The applicant in Case No. 11484, Yates Petroleum Corporation, seeks to amend the Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool whereby:

- a) no more than one well would be allowed to be drilled per 80 acre tract;
- b) the simultaneous dedication of acreage to both oil and gas wells would be allowed;
- c) the gas-oil ratio limitation for the pool would be increased from 2,000 cubic feet of gas per barrel of oil to 10,000 cubic feet of gas per barrel of oil; and,
- d) the oil allowable for the pool would be increased from 940 barrels of oil per day to 1,400 barrels of oil per day.

(7) Yates Petroleum Corporation appeared and presented technical evidence and testimony in support of adopting amended and permanent rules for the Indian Basin-Upper Pennsylvanian Associated Pool.

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

Page -3-

(8) Marathon Oil Company and Santa Fe Energy Resources Inc., both operators in the Indian Basin-Upper Pennsylvanian Associated Pool, appeared through legal counsel at the hearing in support of adopting permanent rules for the pool and in support of Yates' proposed pool rule amendments.

(9) The Indian Basin-Upper Pennsylvanian Associated Pool currently comprises all or portions of Sections 27, 33 and 34, Township 21 South, Range 24 East, and all or portions of Sections 2, 3, 4, 5, 7, 8, 9, 10, 11, 16 and 17, Township 22 South, Range 24 East, NMPM, Eddy County, New Mexico.

(10) According to the latest Division Monthly Statistical Report, there are twenty-one wells producing from the Indian Basin-Upper Pennsylvanian Associated Pool operated by five different companies. The pool rules currently in effect for the Indian Basin-Upper Pennsylvanian Associated Pool are summarized as follows:

SIM. DEDICATION				
<u>SPACING</u>	<u>ALLOWABLE</u>	<u>POOL GOR</u>	<u>ALLOWED</u>	<u>DRILLING DENSITY</u>
320 Acres/Oil	940 BOPD	2,000:1	No	1 Well/160 acres
320 Acres/Gas	1.88 MMCFGD			

(11) The geologic evidence presented at the hearing in this matter and in numerous prior cases presented before the Division indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is a small portion of an extensive Cisco-Canyon reservoir which encompasses the North Dagger Draw-Upper Pennsylvanian Pool, the South Dagger Draw-Upper Pennsylvanian Associated Pool, and the Indian Basin-Upper Pennsylvanian Gas Pool. This extensive reservoir comprises portions of Townships 19, 20, 20 1/2, 21 and 22 and Ranges 23, 24 and 25.

(12) The North Dagger Draw-Upper Pennsylvanian Pool, South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Gas Pool are all currently governed by permanent special rules and regulations summarized as follows:

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

Page -4-

<u>POOL NAME</u>	<u>OIL/GAS/ ASSOCIATED</u>	<u>SPACING</u>	<u>ALLOWABLE</u>	<u>POOL GOR</u>	<u>SIM. DEDICATION ALLOWED</u>
North Dagger Draw-Upper Pennsylvanian	Oil	160 acres	700 BOPD 7.0 MMCFGD	10,000:1	No/NA
South Dagger Draw-Upper Pennsylvanian Associated	Associated	320 acres/ Oil 320 acres/ Gas	1,400 BOPD 9.8 MMCFGD	7,000:1	Yes
Indian Basin- Upper Pennsylvanian	Gas	640 acres	Prorated Gas	NA	NA

(13) In support of its request to increase the oil allowable and gas-oil ratio limitation and to include a provision whereby simultaneous dedication of acreage to both oil and gas wells is allowed, Yates presented geologic evidence which indicates that:

- a) the geologic properties (i.e. permeability, porosity, etc.) of the South Dagger Draw-Upper Pennsylvanian Associated Pool closely resemble those of the Indian Basin-Upper Pennsylvanian Associated Pool;
- b) extension of the pool boundaries for the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool through development drilling will likely demonstrate that the pools represent a single common source of supply; and,
- c) both the South Dagger Draw-Upper Pennsylvanian Associated Pool and the Indian Basin-Upper Pennsylvanian Associated Pool are located in an area of the Cisco-Canyon reservoir which is a transition zone between the oil producing portion of the reservoir and the gas cap, represented by the Indian Basin-Upper Pennsylvanian Gas Pool.

(14) The geologic evidence presented indicates that the Indian Basin-Upper Pennsylvanian Associated Pool is properly classified as an "associated" pool.

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

Page -5-

(15) Previous cases presented before the Division have shown that oil allowables of 1,400 barrels per day per 320-acre proration unit should not have adverse affects on the reservoir or decrease ultimate recovery, therefore, the oil allowable for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased as proposed by the applicant to be consistent with the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(16) The reservoir conditions and correlative rights issues which prompted the deletion of Rule No. 5 (b) of the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico for the South Dagger Draw-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, also exist within the Indian Basin-Upper Pennsylvanian Associated Pool, therefore, the simultaneous dedication of acreage to both oil and gas wells in the Indian Basin-Upper Pennsylvanian Associated Pool should be allowed.

(17) In support of its request to amend the current pool rules so as to allow the drilling of a well on each 80-acre tract within a standard proration unit, the applicant presented drainage data from existing wells within the pool. The information presented indicates that the smallest drainage area calculated was approximately 60 acres, and that the average drainage area within the pool is approximately 112 acres.

(18) The evidence presented indicates that even though both the North Dagger Draw-Upper Pennsylvanian Pool and the South Dagger Draw-Upper Pennsylvanian Associated Pool do not preclude the drilling of a well on each 40-acre tract within a standard proration unit, and that each of these pools has effectively been developed on 40-acre spacing, a more appropriate drilling density for the Indian Basin-Upper Pennsylvanian Associated Pool is one well per 80-acre tract.

(19) The applicant did not present sufficient evidence to justify the need for establishing a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil, however, the limiting gas-oil ratio for the Indian Basin-Upper Pennsylvanian Associated Pool should be increased to 7,000:1 in order to be consistent with the limiting GOR currently in effect for the South Dagger Draw-Upper Pennsylvanian Associated Pool.

(20) No other operator and/or interest owner appeared and presented evidence in opposition to Yates' proposed pool rule amendments or to adopting permanent rules for the subject pool.

CASE NO. 10748 (Reopened)

CASE NO. 11484

Order No. R-9922-C

Page -6-

(21) The establishment of permanent Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, including certain amendments proposed by Yates Petroleum Corporation, will allow the "equivalent" development of the Cisco-Canyon reservoir, will provide the oil and gas allowable incentive necessary for further development and delineation of the pool, will prevent the economic loss caused by the drilling of an excessive number of 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.

IT IS THEREFORE ORDERED THAT:

(1) The Temporary Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool, as promulgated by Division Order No. R-9922, as amended, are hereby amended as follows and continued in full force and effect until further order of the Division.

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

RULE 2. (a) A standard oil proration unit shall comprise 320 acres. A standard gas proration unit shall comprise 320 acres.

RULE 2. (b) Each well shall be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary. No more than one well per 80-acre tract shall be drilled or produced on a standard proration unit.

RULE 6. The limiting gas-oil ratio shall be 7,000 cubic feet of gas per barrel of oil.

RULE 22. The special depth bracket allowable for a 320-acre proration unit shall be 1,400 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.

CASE NO. 10748 (Reopened)
CASE NO. 11484
Order No. R-9922-C
Page -7-

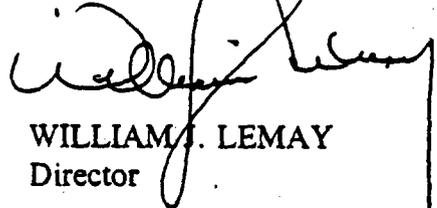
IT IS FURTHER ORDERED THAT:

(2) The application of Yates Petroleum Corporation in Case No. 11484 to delete Rule No. 5 (b) of the General Rules and Regulations for the Associated Oil and Gas Pools of Northwest and Southeast New Mexico, as promulgated by Division Order No. R-5353, as amended, as it pertains to the Indian Basin-Upper Pennsylvanian Associated Pool, thereby allowing the simultaneous dedication of acreage to both oil and gas wells, is hereby approved.

(3) 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



WILLIAM J. LEMAY
Director

S E A L

See Also Order Nos.

R-9922

R-9922-A

R-9922-B

R-9922-C

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. 12006

ORDER NO. R-9922-D

APPLICATION OF MARATHON OIL COMPANY, YATES PETROLEUM CORPORATION, ORYX ENERGY COMPANY, DEVON ENERGY CORPORATION (NEVADA) AND SANTA FE ENERGY RESOURCES, INC. FOR THE EXPANSION OF THE INDIAN BASIN-UPPER PENNSYLVANIAN ASSOCIATED POOL AND THE CONCOMITANT CONTRACTION OF THE INDIAN BASIN-UPPER PENNSYLVANIAN GAS POOL, APPROVAL OF FOUR NON-STANDARD 320-ACRE GAS PRORATION UNITS, AN UNORTHODOX GAS WELL LOCATION, AND APPORTIONMENT OF GAS ALLOWABLES, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on July 9, 1998, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 7th day of December, 1998, the Division Director, having considered 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 Indian Basin-Upper Pennsylvanian Gas Pool is a prorated gas pool currently governed by the "General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Gas Pool," as promulgated by Division Order No. R-8170, as amended, which require standard 640-acre spacing and proration units ("GPU") with wells to be located no closer than 1650 feet from the outer boundary of the GPU nor closer than 330 feet from any governmental quarter-quarter section line or subdivision inner boundary. The current gas allowable for the Indian Basin-Upper Pennsylvanian Gas Pool is approximately 6.5 MMCFG per day per GPU.

(3) The Indian Basin-Upper Pennsylvanian (Prorated) Gas Pool currently comprises the following described area in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM

Section 3:	W/2
Section 4:	All
Sections 8 and 9:	All
Section 10:	W/2
Section 15:	W/2
Sections 16 through 30:	All
Sections 32 through 36:	All

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 19 through 21:	All
Sections 28 through 32:	All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Sections 1 through 5:	All
Sections 8 through 17:	All
Section 21:	N/2
Section 22:	All.

(4) The Indian Basin-Upper Pennsylvanian Associated Pool is currently governed by the "Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool," as promulgated by Division Order No. R-9922, as amended, which require standard 320-acre oil and gas spacing units with wells to be located no closer than 660 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary, and with no more than one well per 80-acre tract to be drilled or produced on a standard proration unit. The special depth bracket allowable for the pool is 1,400 barrels of oil per day. The limiting gas-oil ratio for the pool is 7,000 cubic feet of gas per barrel of oil, which results in a casinghead gas allowable of 9.8 MMCFG per day.

(5) The Indian Basin-Upper Pennsylvanian Associated Pool currently comprises the following described area in Eddy County, New Mexico:

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Section 27:	S/2
Sections 33 and 34:	All.

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPPM

Sections 2 through 10: All
Section 11: N/2
Sections 16 and 17: All.

(6) The applicants, Marathon Oil Company, Yates Petroleum Corporation, Oryx Energy Company, Devon Energy Corporation (Nevada), and Santa Fe Energy Resources, Inc. seek an order expanding the Indian Basin-Upper Pennsylvanian Associated Pool in Eddy County, New Mexico to include:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPPM

Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPPM

Sections 20 and 21: All
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPPM

Section 1: E/2
Section 12: E/2
Section 13: E/2

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPPM

Section 18: All

AND THE concomitant contraction of the Indian Basin-Upper Pennsylvanian Gas Pool by deleting therefrom:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPPM

Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPPM

Sections 20 and 21: All
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPPM

Section 1: E/2
Section 12: E/2
Section 13: E/2.

Nomenclature

Case No. 12006

Order No. R-9922-D

Page 4

(7) In conjunction with the proposed adjustment to the boundaries of the two subject pools, the applicants seek to establish the following four 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool within Section 36, Township 21 South, Range 23 East, NMPM, and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM, Eddy County, New Mexico:

(A) the W/2 of Section 36, comprising 320 acres, which is to be dedicated to the existing Lowe State Gas Com Well No. 1 (API No. 30-015-10342), located 1995 feet from the North line and 1712 feet from the West line (Unit F) of Section 36;

(B) the W/2 equivalent of Section 1, comprising 336.57 acres, on which there is currently no well;

(C) the W/2 of Section 12, comprising 320 acres, which is to be dedicated to the existing Smith Federal Gas Com Well No. 2 (API No. 30-015-26834) located 2049 feet from the North line and 480 feet from the West line (Unit E) of Section 12; and

(D) the W/2 of Section 13, comprising 320 acres, which is to be dedicated to the HOC Federal Gas Com Well No. 2 (API No. 30-015-26939) located 330 feet from the North and West lines (Unit D) of Section 13.

(8) The proposed acreage and pool rededication results in the Lowe State Gas Com Well No. 1 being only 928 feet from the outer boundary of its newly designated 320-acre gas proration unit. The resulting unorthodox gas well location for this well requires proper authorization pursuant to the appropriate rules and regulations governing the Indian Basin-Upper Pennsylvanian Gas Pool.

(9) On behalf of the applicants, Marathon Oil Company presented geologic, petroleum engineering, and oil and gas mineral ownership and land evidence, which demonstrates that this application should be granted and which is summarized as follows:

(A) In the Indian Basin area, the Upper Pennsylvanian interval contains multiple compartmentalized reservoirs, which are productive of oil, gas and water from several dolomitized horizons from the top of the Cisco formation to

the base of the Canyon formation.

(B) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Gas Pool, including the extension area, and the Indian Basin-Upper Pennsylvanian Associated Pool were originally developed with flowing gas wells on 640-acre gas spacing such that, once the gas wells stopped flowing as a result of water encroachment, the wells were abandoned.

(C) The Indian Basin-Upper Pennsylvanian Gas Pool attained its maximum extension in the 1970s and, since then, water encroachment has advanced from east to west slowly watering out the flowing gas wells. Currently, flowing gas production occurs west of a structural contour line at minus 3300 feet subsea elevation.

(D) In 1992, Yates Petroleum Corporation reentered and recompleted the Hickory "ALV" Federal Well No 1 (API No. 30-015-10566), located 1650 feet from the North and West lines (Unit F) of Section 17, Township 22 South, Range 24 East, NMPM. Using the same high capacity pumps used in the nearby South Dagger Draw-Upper Pennsylvanian Associated Pool, Yates was able to achieve rates of 400 BOPD, 500 MCFGPD and 1200 BWPD in a former Indian Basin-Upper Pennsylvanian Gas Pool well which had previously been depleted. Thereafter the Division entered Order No. R-9922 and created the Indian Basin-Upper Pennsylvanian Associated Pool.

(E) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are in a structural feature separated from the Indian Basin-Upper Pennsylvanian Gas Pool by a structural saddle at the top of the Cisco at a subsea elevation of minus 3500 feet. New wells located within 320-acre spacing units in the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are now producing or have the potential to produce oil and gas that was not previously recovered when this area was originally developed as part of the Indian Basin-Upper Pennsylvanian Gas Pool.

(F) Current oil and gas production from the Cisco/Canyon formations in the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area required extensive formation "de-watering." Hydrocarbons are mobilized by continuous movement of large volumes of water with artificial lift.

(G) Pressure data demonstrates that:

(i) the Indian Basin-Upper Pennsylvanian Associated Pool, with a pressure on average of 1600 psi, is not in pressure communication with the Indian Basin-Upper Pennsylvanian Gas Pool, which has a current pressure on average of 500 psi; and

(ii) wells in the extension area of Township 21 South, Range 24 East, NMPM, have a pressure related to the Indian Basin-Upper Pennsylvanian Associated Pool.

(H) Production data demonstrates that:

(i) there are no flowing gas wells in the extension area; and

(ii) old flowing gas wells in the extension area were abandoned when they watered out and new wells are attaining oil and gas production by using high capacity pumps.

(I) The division of Section 36, Township 21 South, Range 23 East, NMPM and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM (the transition area) into non-standard 320-acre, more or less, gas proration and spacing units will provide an equitable "buffer" between the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Upper Pennsylvanian Associated Pool because:

(i) wells have been located or can be located such that drainage by wells in the Indian Basin-Upper Pennsylvanian Associated Pool can be met with counter drainage from wells located or to be located on the eastern side of each of the four 320-acre, more or less, non-standard gas spacing and proration units in the Indian Basin-Upper Pennsylvanian Gas Pool provided that wells located on the eastern side of these units can be no closer than 660 feet from the eastern boundary, which is also the setback requirement for wells in the Indian Basin-Upper Pennsylvanian Associated Pool; and

(ii) wells located in the Indian Basin-Upper Pennsylvanian Gas Pool will not suffer unfair competition from wells located or to be located in these four, non-standard gas proration units because allowables will be apportioned based upon the gas proration system adopted for the Indian Basin-Upper Pennsylvanian Gas Pool.

(J) The granting of this application should not impair the correlative rights:

(i) of any working interest owner within any of the existing 640-acre GPUs because there are voluntary joint operating agreements requiring that all those owners continue to share in production and pay costs from the new 320-acre spacing units on the same proportional basis as in the original 640-acre unit;

(ii) of any overriding royalty interest owner or the federal royalty under a federal oil and gas lease within any of the existing 640-

acre GPUs because there are federal communitization agreements requiring that all those owners continue to share in production from the new 320-acre spacing units on the same proportional basis as in the original 640-acre unit;

(iii) under Section 32, Township 21 South, Range 24 East, NMPM, which consists of two 320-acre State of New Mexico leases and is operated by Marathon Oil Company, because there are no overriding royalty owners and the State Land Office desires that the communitization agreement for the existing 640-acre proration unit terminate and be replaced by two 320-acre proration units co-extensive with the two State leases; and,

(iv) under Section 36, Township 21 South, Range 23 East, NMPM, which consists of two State of New Mexico leases and is operated by ORYX Energy Company, because there are no overriding royalty owners and the State Land Office desires that the existing 640-acre communitization agreement terminate and be replaced by two 320-acre communitization agreements.

(10) The evidence and testimony presented at the hearing further indicate that:

(A) The Cisco/Canyon formations within the Indian Basin-Upper Pennsylvanian Associated Pool and the extension area are a single structural feature such that wells located in this area should be subject to the same special rules and regulations.

(B) Geologic and petroleum engineering evidence demonstrate that substantial volumes of oil and gas, which otherwise would not be produced, can be economically recovered from the extension area if that area is subject to the

current rules applicable to the Indian Basin-Upper Pennsylvanian Associated Pool, thereby preventing waste.

(C) Making the extension area part of the Indian Basin-Upper Pennsylvanian Associated Pool will afford the opportunity to increase the de-watering process in the reservoir and improve recovery efficiencies for both oil and gas.

(D) The adoption of the four 320-acre, more or less, non-standard gas proration and spacing units will establish a temporary "buffer" or transition area between the Indian Basin-Upper Pennsylvanian Gas Pool and the Indian Basin-Upper Pennsylvanian Associated Pool, which at this time will establish equity and protect correlative rights.

(11) The applicants are all of the operators of wells in the extension area and they have met and unanimously agreed upon this application.

(12) In accordance with Division notification rules, notification of this application and request for hearing has been sent to the owners within the proposed expansion area and to the offset operators to each non-standard gas proration and spacing unit and no objections have been received by either the Division or Marathon Oil Company, which sent out these notices.

(13) In order to prevent waste, to prevent the drilling of unnecessary wells, to protect correlative rights and provide for a more orderly development of the Cisco/Canyon formations, it is necessary to do the following:

(A) contract the Indian Basin-Upper Pennsylvanian Gas Pool and expand the Indian Basin-Upper Pennsylvanian Associated Pool as described in Finding Paragraph No. 6;

(B) approve the four non-standard 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool as described in Finding Paragraph No. 7; and,

(C) approve an unorthodox gas well location for the Lowe State Gas Com Well No. 1 located 1995 feet from the North line and 1712 feet from the West line (Unit K) of said Section

36.

(14) Marathon Oil Company, Santa Fe Energy Resources, Inc. and ORYX Energy Corporation were present at the hearing and Marathon Oil Company, on behalf of the applicants, provided technical land, geologic and engineering testimony concerning the reservoir and, these pools.

(15) No other operator and/or interest owner appeared at the hearing in opposition to the application.

(16) Approval of the applicant's request will allow the interest owners the opportunity to economically recover their share of the oil and gas in the subject pools, will not reduce ultimate recovery from the subject pools, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby contracted by the deletion of the following described area:

TOWNSHIP 21 SOUTH RANGE 23 EAST. NMPM

Section 36: E/2

TOWNSHIP 21 SOUTH RANGE 24 EAST. NMPM

Sections 20 and 21: All

Sections 28 through 32: All

TOWNSHIP 22 SOUTH RANGE 23 EAST. NMPM

Section 1: E/2

Section 12: E/2

Section 13: E/2.

(2) Concomitantly, the Indian Basin-Upper Pennsylvanian Associated Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein the following described area:

TOWNSHIP 21 SOUTH RANGE 23 EAST. NMPM

Section 36: E/2

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM

Sections 20 and 21: All
Sections 28 through 32: All

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM

Section 1: E/2
Section 12: E/2
Section 13: E/2.

TOWNSHIP 22 SOUTH, RANGE 24 EAST, NMPM

Section 18: All.

(3) The following four 320-acre, more or less, GPU's within the Indian Basin-Upper Pennsylvanian Gas Pool within Section 36, Township 21 South, Range 23 East, and Sections 1, 12, and 13, Township 22 South, Range 23 East, NMPM, Eddy County, New Mexico, are hereby approved:

(A) the W/2 of Section 36, comprising 320 acres, which is to be dedicated to the existing Lowe State Gas Com Well No. 1 (API No. 30-015-10342), located at an unorthodox gas well location for the 320-acre GPU, 1995 feet from the North line and 1712 feet from the West line (Unit F) of Section 36;

(B) the W/2 of Section 1, comprising 336.57 acres, on which there is currently no well;

(C) the W/2 of Section 12, comprising 320 acres, which is to be dedicated to the existing Smith Federal Gas Com Well No. 2 (API No. 30-015-26834) located 2049 feet from the North and 480 feet from the West lines (Unit E) of Section 12; and,

(D) the W/2 of Section 13, comprising 320 acres, which is to be dedicated to the HOC Federal Gas Com Well No. 2 (API No. 30-015-26939) located 330 feet from the North line and 330 feet from the West line (Unit D) of Section 13.

(4) Any future well located in any of these four non-standard gas proration and spacing units no closer than 660 feet to the eastern boundary of the unit shall be considered

to be at a standard location.

(5) The apportionment of gas allowables for the four non-standard GPU's shall be accomplished by applying a 0.5 acreage factor to each of the non-standard GPU's.

(6) An unorthodox gas well location for the following well in the Indian Basin-Upper Pennsylvanian Gas Pool, which became unorthodox as a result of the change in pool boundary, is hereby approved: Lowe State Gas Com Well No. 1 located 1995 feet from the North line and 1712 feet from the West line and of Section 36, Township 21 South, Range 23 East, NMPM, Eddy County, New Mexico.

(7) The locations of all wells presently drilling to or completed in the Indian Basin-Upper Pennsylvanian Associated Pool within this expansion area are hereby approved; the operator of any well having an unorthodox location shall notify the Artesia District Office of the Division in writing of the name and location of the well within thirty days from the date of this order.

(8) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the Indian Basin-Upper Pennsylvanian Associated Pool within this expansion area shall have dedicated thereto 320 acres; or, pursuant to Paragraph C of Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

(9) Failure to file new Forms C-102 with the Division dedicating 320 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 being shut-in.

(10) Jurisdiction of this case 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



LORI WROTENBERY
Director

SEAL