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

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

CASE NO. 13153, de novo

APPLICATION OF PRIDE ENERGY COMPANY FOR CANCELLATION OF A DRILLING PERMIT AND REINSTATEMENT OF A DRILLING PERMIT, AN EMERGENCY ORDER HALTING OPERATIONS, AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

ORDER NO. R-12108-A

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION:

THIS MATTER came before the Oil Conservation Commission (the Commission) for hearing on August 12, 2004 at Santa Fe, New Mexico on the application of Yates Petroleum Corporation for *de novo* review, and the Commission, having heard the evidence and arguments of counsel and carefully considered the same, now, on this 9th day of September, 2004,

FINDS:

- 1. Notice has been given of the application and the hearing of this matter, and the Commission has jurisdiction of the parties and the subject matter.
- 2. In the original application in this case, Pride Energy Company (Pride) sought an order canceling a permit issued to Yates Petroleum Corporation (Yates) to re-enter the abandoned State X Well No. 1 (API No. 30-025-07838) (the subject well), located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 12, Township 12

South, Range 34 East. NMPM, Lea County, New Mexico. Pride also sought reinstatement of a drilling permit previously issued to it to re-enter the same well, and an emergency order preventing Yates from conducting any operations on the well.

- 3. Pride additionally sought an order pooling all uncommitted mineral interests underlying the W/2 of Section 12, Township 12 South, Range 34 East, NMPM, Lea County, New Mexico, from the surface to the base of the Mississippian formation, forming a standard 320-acre gas spacing and proration unit (the Unit) for all formations or pools spaced on 320 acres within this vertical extent, which presently include, but are not necessarily limited to, the undesignated Four Lakes-Mississippian Gas Pool and the undesignated Four Lakes-Morrow Gas Pool, such unit to be dedicated to the well.
- 4. Both Yates and Pride appeared at the hearing through counsel and presented land and technical testimony. Pride presented the testimony of John W. Pride, a petroleum landman and one of the principals of Pride, and Jeff Ellard, a geologist employed by Pride. Yates presented the testimony of Charles E. Moran, a landman employed by Yates, John Amiet, a geologist employed by Yates, and David F. Boneau, a petroleum engineer employed by Yates.

Undisputed Facts

- 5. Based on the statements of counsel and testimony offered by the parties, the Commission concludes that the following facts pertinent to this case are undisputed:
 - (a) Yates is the owner of the entire working interest in the north half and southeast quarter of Section 12, Township 12 South, Range 34 East.
 - (b) Pride is the owner of the entire working interest in the southwest quarter of Section 12.
 - (c) The subject well is located in the northwest quarter of Section 12 on land leased exclusively to Yates.
 - (d) Pride is the operator of the State M Well No. 1 (API No. 30-025-20689) (the State M), located 660 feet from the south and west lines of Section 1, Township 12 South, Range 34 East, which well is completed in, and producing from, the Mississippian formation. That well is dedicated to a spacing unit comprising the west half of Section 1, pursuant to a voluntary unit agreement to which Pride and Yates are both parties.
 - (e) On May 24, 2001 Yates filed an Application for Permit to Drill (APD) to re-enter the subject well, which it designated the "Limbaugh AYO State Well No. 1", and to which it proposed to dedicate a spacing unit comprising the north half of Section 12. The Division approved that APD on May 25, 2001.

- (f) On April 15, 2002, in anticipation of the forthcoming expiration of its APD, Yates filed a sundry notice to extend its APD for an additional year, until May 25, 2002. The Division approved the requested extension on April 18, 2002.
 - (g) On May 25, 2003, Yates' APD to re-enter the subject well expired.
- (h) On July 10, 2003, Pride filed an APD to re-enter the subject well under the name "State X Well No. 1," to which it proposed to dedicate a spacing unit comprising the west half of Section 12, including the southwest quarter, which is leased to Pride.
 - (i) Pride's APD was approved by the Division on July 16, 2003.
- (j) On August 25, 2003, Yates filed a new APD to re-enter the subject well, again designating the well as the "Limbaugh AYO State No. 1" and again proposing to dedicate to the well a spacing unit comprising the north half of Section 12.
- (k) On August 26, 2003, Chris Williams, District Supervisor of OCD District 1, approved Yates' APD for the subject well, and prepared a letter to Pride canceling Pride's APD.
- (l) Yates has stipulated that it will undertake no operations with respect to the subject well pending the Commission's decision, thereby mooting Pride's request for an emergency order prohibiting such operations.

Technical Evidence

- 6. Although the history and land ownership are basically undisputed, as indicated in the foregoing findings, there exists controversy concerning the technical aspects of the case.
- 7. Mr. Ellard, Pride's geologist, testified that the objective in re-entering the subject well would be the Austin cycle of the upper Mississippian (the target reservoir), in which production was encountered in the State M, to the north of the subject well.
- 8. Mr. Ellard further testified that the target reservoir was formed by shedding of fragmented rock from a raised fault block produced by faults lying to the west of these two wells. In wells farther to the south and east, away from the faulting, where the rock was not fragmented, the formation is present, but with insufficient porosity to be productive.
- 9. Mr. Ellard opined that producible hydrocarbons would most likely be located closest to the fault because, of the material shed from the upthrown side of the fault, that material composed of larger particles, and therefore characterized by greater porosity and permeability, would be deposited in close proximity to the fault.

- 10. Mr. Ellard placed the fault that created this reservoir on a bearing more or less north to south and located a short distance to the west of the State M and the subject well, generally along and close to the section line between Section 12 and the adjacent Section 11. On this basis, he opined that the subject well would more likely drain producible hydrocarbons from the quarter section lying south of the subject well (the southwest quarter of Section 12), than from the quarter section lying east of the subject well (the northeast quarter of Section 12).
- 11. Mr. Ellard testified that it is not possible to determine with any degree of accuracy the extent of the target reservoir with the information presently available. However, he opined, based on comparison of the old log of the subject well with the old log of the State M, that the subject well would likely encounter a comparable thickness of pay in the target reservoir (25 feet as compared to 30 feet in the State M).
- 12. Mr. Amiet, Yates' geologist, agreed generally with Mr. Ellard's interpretation of the nature of the target reservoir and the mechanism of deposition, including the assessment that the extent of the target reservoir could not be determined with available information, but disagreed with Mr. Ellard's placement of the fault that produced the upthrown block from which the reservoir material was presumably eroded.
- 13. Mr. Amiet testified that 3D seismic run along a west-to-east bearing close to the location of the subject well, and which was admitted in evidence, demonstrated that no significant fault down-thrown to the east existed in the westward proximity of the subject well. He opined that the fault that controls the location of the target reservoir runs to the north of the State M and trends northeast to southwest. Accordingly, he concluded that the subject well is more distant from the fault than is the State M, and the Pride acreage in the southwest quarter of Section 12 is yet more distant.
- 14. Mr. Amiet interpreted the logs from the subject well to show no more than 10 feet of reservoir in the target formation (as compared to 30 feet in the M1), confirming his conclusion that the subject well is more distant from the fault.
- 15. Mr. Amiet testified that Yates had other 3-D seismic runs that tended to confirm his placement of the controlling fault, but he did not offer this other seismic information in evidence.
- 16. Mr. Amiet further testified that the prevailing contours on the down-thrown side of the controlling fault favored the flow of eroded material to the east, rather than to the south. On this basis, he opined that the Yates acreage in the east half of Section 12 is more likely to contain reservoir rock that might be drained by the subject well than is the Pride acreage in the southwest quarter.
- 17. Dr. Boneau, Yates' engineering witness, calculated the probable drainage area of the State M based on production data and log analysis, to be 145 acres. Assuming that the drainage characteristics of the subject well would be otherwise similar to those of the State M, he calculated that 97% of production in the target reservoir from the subject well would

be drawn from Yates acreage if Yates assumptions were correct, and 65% if Pride's assumptions were correct.

Analysis of Legal Issues

- 18. This case requires an analysis of the effect of the Division's action in approving an APD.
- 19. Pride filed an APD proposing a well at an orthodox location, and attached thereto a Dedication Plat (C-102) proposing to dedicate thereto a standard unit which was not then dedicated to any other well in the pool. Accordingly, Pride's APD was *prima facie* valid, and the Division properly approved it.
- 20. The Division, through its district supervisor, subsequently purported to revoke its approval of Pride's APD on the ground that Pride did not own an interest in the drill-site tract.
- 21. As this Commission observed in Order No. R-11700-B, entered in Cases No. 12731 and 12744, the Division has neither the responsibility nor jurisdiction to determine whether an applicant for a permit to drill has the requisite title to the land in question. Order No. R-11700-B, Finding 27.
- 22. The Commission further stated in Order No. R-11700-B that an applicant for a permit to drill must have a good faith claim of title. Order R-11700-B, finding 28.
- 23. Although the Division can and should cancel an APD when it properly determines that no such good faith claim exists, as the Commission determined, based on a District Court judgment, in Order No. R-11700-B, it should not make that determination, which necessarily cannot be made on the face of the APD or from Division records, without first giving the applicant notice and an opportunity for a hearing. Although the Commission doubts that the right conferred by approval of an APD is properly characterized as "property," it nevertheless concludes that such approval confers rights that should not be revoked arbitrarily.
- 24. In any event, a determination that Pride did not have a good faith claim could not have been made in this case. Here, unlike Cases No. 12731 and 12744, there is no title dispute. It is undisputed that Pride owns a working interest in the unit proposed in its APD, i.e., the west half of Section 12, and that the west half of Section 12 is a standard unit permitted by applicable spacing rules. It is likewise undisputed that, at the time Pride filed its APD, Yates' previously approved APD calling for a north half spacing unit had expired.
 - 25. Again, the Commission said in Order No. R-11700-B:

An operator may first apply for a permit to drill a well and may thereafter pool (on a voluntary or compulsory basis) separately owned tracts to the well.

Alternatively, the operator may first pool and later seek a permit to drill. The two are not mutually exclusive, and there is no preferred methodology.

Order R-11700-B, finding 35.

- 26. The Commission accordingly concludes that an owner who would have a right to drill at its proposed location in the event of a voluntary or compulsory pooling of the unit it proposes to dedicate to the well has the necessary good faith claim of title to permit it to file an APD even though it has not yet filed a pooling application. If an owner uses this right to "tie-up" acreage without proceeding diligently to seek voluntary or compulsory pooling, or if the acreage can more properly be developed by inclusion in a different unit, an aggrieved owner can file an application with the Division to cancel its approval of the APD, which the Division can do after notice and hearing.
- 27. It follows that Pride's approved APD in this case was improperly revoked, and Yates' subsequent APD was improperly approved. It does not necessarily follow, however, that Pride is entitled to the relief it seeks in this case.
 - 28. As the Commission stated in Order No. R-11700-B:

An application for a permit to drill serves different objectives than an application for compulsory pooling and the two proceedings should not be confused.

Order No. R-11700-B, finding 33.

- 29. In Order No. R-11700-B, the Commission ordered cancellation of an APD based on a judicial determination that the party who filed the APD had no title to the subject unit and therefore could not be an operator of a well within that unit. The Commission further ordered approval of an APD subsequently filed by a party whose title the court had approved. However, the Commission deferred the issue of the proper configuration of the unit to be dedicated to the proposed well for determination in a pending compulsory pooling proceeding.
- 30. Thus the existence of a properly approved APD should not be a basis for prejudging the issues in a compulsory pooling application. If the applicant prevails on its compulsory pooling application and is appointed operator in a compulsory pooling order, it is entitled to approval of an APD in any case. If the compulsory pooling application is denied, the applicant having in this case no other basis for a claim of title to the drill-site tract, cancellation of the APD would be a necessary consequence.
- 31. Ordinarily, Division precedent would require an owner opposing a compulsory pooling application on the ground that prudent development would counsel the formation of a different unit to file a competing application. However, in this case, compulsory pooling would be unnecessary to form a north half unit, as Yates proposes.

Accordingly, Yates should be permitted to offer evidence in support of its proposal as a defense to Pride's compulsory pooling application.

32. The Commission accordingly concludes that its decision in this case must be based on its evaluation of the technical testimony presented in support of, and against, Pride's compulsory pooling application, irrespective of the circumstances with regard to the approval of the respective APDs.

Analysis of Technical Issues

- 33. Expert witnesses for both parties concurred that, on the basis of the information presently available, the total quantity of reserves in the Mississippian formation underlying Section 12, or particular quarter sections thereof, cannot practicably be determined.
- 34. Neither of Yates' witnesses offered any convincing reason for supposing that the east half of Section 12 would be productive in the Mississippian. Dr. Boneau testified that the State M well would have a drainage area of 145 acres, and that the subject well is likely to be only half as good a well, suggesting a drainage radius for the subject well of less than 160 acres. Although Mr. Amiet projected the target reservoir into the northeast quarter of the section, he also testified that porosity would fall off rapidly as the distance from the fault increased, and he conceded that his projection of the alluvial fan that produced the target reservoir to the east depended upon the unproven assumption that the observed contours of the formation corresponded to the contours existing at the time of deposition.
- 35. If Pride's placement of the controlling fault as bearing north to south, and in close proximity to the subject well, is correct, then its conclusion that the southwest quarter of Section 12 will likely be productive in the Mississippian, and the east half of the section will not be productive, accords with the understanding of both geologists of the nature of this reservoir.
- 36. Although no good logs of the subject well are available, the Commission concludes that Mr. Pride's interpretation that there is likely a comparable amount of reservoir footage in the subject well to that encountered in the State M well is more convincing, and that interpretation is consistent with the north-south alignment of the controlling fault, and with the conclusion that the southwest quarter of Section 12 is likely to be productive.
- 37. If the southwest quarter proves to be productive, and the east half of the section does not, as both geologists would predict if the fault actually exists in the north-south orientation, then the establishment of stand up units in this section would violate Pride's correlative rights, because Pride would have to share any production it could extract from the southwest quarter with Yates, even though the Yates acreage would not be contributory. If lay down units are established, and the east half proves to be productive, Yates can recover for itself all of the east half production by drilling on the east-half unit.

- 38. Yates relies principally on its 3-D seismic to demonstrate that the critical fault is oriented northeast-southwest, and not north-south. Though Mr. Amiet testified that Yates has seismic data that confirms his suggested location of the fault, Yates did not offer any such seismic data in evidence. A trier of fact is entitled to assume that if a party does not offer relevant evidence that is in its possession, such evidence would not have supported that party's position.
- 39. Though Mr. Amiet testified that he interpreted the seismic data offered in evidence as disproving the existence of a north-south fault in the location suggested by Pride, he conceded that a small fault with a throw of as much as 100 feet might exist that might not be apparent from the seismic data. The existence of a fault with much reduced throw compared to that farther to the north would be consistent with Mr. Pride's testimony that the fault "dies" to the south.
- 40. The Commission concludes that Pride's geologic interpretation is, on the whole, more convincing that Yates' interpretation.
 - 41. The Commission accordingly concludes that
 - (a) a compulsory pooled unit should be established consisting of the west half of Section 12, Township 12 South, Range 34 East. NMPM, Lea County, New Mexico, and that such unit should be dedicated to the subject well;
 - (b) Pride should be designated operator of the subject well and of the unit; and
 - (c) Yates APD for re-entry of the subject well should be cancelled.
- 42. The order should provide that any pooled working interest owner in the proposed unit who does not pay its share of estimated well costs should have withheld from production its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in re-entering and drilling the well.
- 43. Reasonable charges for supervision of unit operations (combined fixed rates) should be fixed at \$5,000.00 per month while drilling and \$600.00 per month while producing, provided that these rates should be adjusted annually pursuant to Section III.1.A.3. of the COPAS form titled "Accounting Procedure-Joint Operations."
- 44. Yates commenced operations to re-enter the subject well prior to the filing of this application, based on an APD reflecting Division approval.
- 45. Pride should reimburse Yates for reasonable costs incurred by Yates in connection with such operation.

IT IS THEREFORE ORDERED THAT:

- 1. Pursuant to the application of Pride, all uncommitted interests, whatever they may be, in the oil and gas from the surface to the base of the Mississippian formation underlying the W/2 of Section 12, Township 12 South, Range 34 East, NMPM, Lea County, New Mexico, are hereby pooled to form a standard 320-acre gas spacing and proration unit (the Unit) for all formations or pools spaced on 320 acres within this vertical extent, which presently include, but are not necessarily limited to, the Undesignated Four Lakes-Mississippian Gas Pool and the Undesignated Four Lakes-Morrow Gas Pool. The Unit shall be dedicated to the subject well, located 1980 feet from the North line and 660 feet from the West line (Unit E) of Section 12.
- 2. The operator of the Unit shall commence re-entry operations on the subject well on or before December 31, 2004 and shall thereafter continue such operations with due diligence to test the Mississippian formation.
- 3. In the event the operator does not commence re-entry operations on or before December 31, 2004, this order shall be of no further effect, unless the operator obtains a time extension from the Division Director for good cause.
- 4. Should the subject well not be completed within 120 days after commencement thereof, this order shall be of no further effect, and the unit created by this order shall terminate, unless the operator obtains a time extension from the Division Director following notice and hearing.
- 5. Upon final plugging and abandonment of the subject well, the pooled unit created by this Order shall terminate unless this order has been amended to authorize further operations.
- 6. Applicant is hereby designated the operator of the subject well and of the Unit.
- After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interests in the Unit, including unleased mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Unit an itemized schedule of estimated costs of re-entering, completing and equipping the subject well ("well costs").
- 8. Within 30 days from the date the schedule of estimated well costs is furnished, any pooled working interest owner shall have the right to pay its share of estimated well costs to the operator in lieu of paying its share of reasonable well costs out of production as hereinafter provided, and any such owner who pays its share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges. Pooled working interest owners who elect not to pay their share of estimated well costs as

provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners."

- 9. Within 30 days after the effective date of this order, Yates shall furnish the Division and Pride an itemized schedule of actual well costs incurred by Yates in conducting re-entry operations on the subject well after August 25, 2003 and prior to the time when Yates received notice of the filing of the original application in this case. If no objection to such actual costs is received by the Division, and the Division has not objected within 45 days following receipt of the schedule, such costs shall be deemed to be the reasonable well costs. If there is an objection to the reasonableness of such costs within the 45-day period, the Division will determine the amount thereof that constitutes reasonable well costs after notice and hearing.
- 10. If Yates elects to pay in advance its share of costs of the re-entry of the subject well pursuant to this order, Yates may deduct the amount of such actual costs from its share of estimated well costs to be paid pursuant to ordering paragraph 8, but if the Division subsequently determines that any amount of such actual costs does not constitute reasonable well costs, Yates shall, within 60 days after such determination, pay to Pride the amount that such actual costs previously reimbursed to Yates exceed the amount thereof that the Division determines to be reasonable.
- 11. If Yates elects not to pay in advance its share of costs of the re-entry of the subject well pursuant to this order, Pride shall pay to Yates the amount of such actual costs incurred by Yates within 45 days after the later of (a) receipt of the schedule of such costs as required by ordering paragraph 9 or (b) the expiration of the time provided by ordering paragraph 8 within which Yates could elect to pay its share of well costs in advance, unless Pride files an objection to the reasonableness of such actual costs, in which event Pride shall pay to Yates the amount thereof that the Division determines to be reasonable within 60 days after such determination.
- 12. The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs within 90 days following completion of the proposed well. If no objection to the actual well costs is received by the Division, and the Division has not objected within 45 days following receipt of the schedule, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs after notice and hearing.
- 13. Within 60 days following determination of reasonable well costs, any pooled working interest owner who has paid its share of estimated costs in advance as provided above shall pay to the operator its share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator the amount, if any, that the estimated well costs it has paid exceed its share of reasonable well costs.
- 14. The operator is hereby authorized to withhold the following costs and charges from production:

- (a) the proportionate share of reasonable well costs attributable to each non-consenting working interest owner; and
- (b) as a charge for the risk involved in drilling the well, 200% of the above costs.
- 15. The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.
- 16. Reasonable charges for supervision (combined fixed rates) are hereby fixed at \$5,000.00 per month while drilling and \$600.00 per month while producing, provided that these rates shall be adjusted annually pursuant to Section III.1.A.3. of the COPAS form titled "Accounting Procedure-Joint Operations." The operator is authorized to withhold from production the proportionate share of both the supervision charges and the actual expenditures required for operating the well, not in excess of what are reasonable, attributable to pooled working interest owners.
- 17. Should all the parties to this compulsory pooling order reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.
- 18. The operator of the well and Unit shall notify the Division in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order.
- 19. Pride's APD for the State "X" Well No. 1 dated July 10, 2003 is hereby <u>reinstated</u>, and shall continue in effect for one year from the date of this order, unless this order sooner terminates.
- 20. Yates Petroleum Corporation's APD for the State "X" Well No. 1 dated August 25, 2003 is hereby cancelled ab initio.
- 21. Jurisdiction of this case 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.

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STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

MARK E. FESMIRE, P.E., CHAIR

JAMI BAILEY, CPG, MEMBER

FRANK T. CHAVEZ, MEMBER

SEAL