

**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 NOS. 10386 and 10363  
Order No. R-9608**

**APPLICATION OF MCKAY OIL CORPORATION  
FOR COMPULSORY POOLING, EDDY COUNTY,  
NEW MEXICO.**

**APPLICATION OF YATES PETROLEUM  
CORPORATION FOR COMPULSORY POOLING,  
EDDY COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on September 19, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 5th day of November, 1991, 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. 10386 and 10363 were consolidated at the time of the hearing for the purpose of testimony, and, inasmuch as approval of one application would necessarily require denial of the other, one order should be entered for both cases.

(3) The applicant in Case No. 10386, McKay Oil Corporation (McKay), seeks an order pooling all mineral interests in the Undesignated South Dagger Draw-Upper Pennsylvanian Associated Pool underlying the N/2 of Section 25, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, forming a standard 320-acre oil or gas spacing and proration unit for said pool. Said unit is to be dedicated to the applicant's proposed Charolette McKay Federal Well No. 2 to be drilled at a standard location 660 feet from the North and West lines (Unit D) of said Section 25.

(4) The applicant in Case No. 10363, Yates Petroleum Corporation (Yates), seeks an order pooling all mineral interests in the Undesignated South Dagger Draw-Upper Pennsylvanian Associated Pool underlying the W/2 of Section 25, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, forming a standard 320-acre oil or gas spacing and proration unit for said pool. Said unit is to be dedicated to the applicant's proposed Staghorn "AJG" Federal Com Well No. 1 to be drilled at a standard location 660 feet from the South and West lines (Unit M) of said Section 25.

(5) Both McKay and Yates have the right to drill a well in Section 25, both seek to be designated the operator of its proposed proration unit, and both seek the adoption of drilling and production overhead charges and risk penalties.

(6) Both of the proposed well locations are within one mile of the outer boundary of the South Dagger Draw-Upper Pennsylvanian Associated Pool and are therefore subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-5353, as amended, which require standard 320-acre oil or gas spacing and proration units, well locations no closer than 660 feet to the outer boundary of the proration unit nor closer than 330 feet to any quarter-quarter section line or subdivision inner boundary, a limiting gas-oil ratio of 10,000 cubic feet of gas per barrel of oil, and a special depth bracket allowable of 1400 barrels of oil per day, said allowable to be produced by one or more oil wells on the proration unit.

(7) According to evidence presented, Yates currently owns or controls the SW/4 and the SW/4 NW/4 of Section 25. McKay currently owns or controls the remaining acreage within the section.

(8) The parties involved have been unable to reach an agreement as to the optimum well location and orientation of the spacing units within Section 25.

(9) Both parties presented extensive geologic evidence and testimony at the hearing which indicate their respective geologic interpretations of the Canyon dolomite reservoir underlying the subject area.

(10) Yates presented geologic and engineering evidence and testimony to support its contentions that:

- a) the Canyon dolomite reservoir is complex in nature with structural, stratigraphic and hydrodynamic factors all playing a part in the hydrocarbon trapping mechanism;
- b) productive wells in the field are those which have encountered sufficient dolomite thickness above the tilted oil/water contact;
- c) the E/2 of Section 25 should essentially be non-productive due to a combination of factors including pinching out of the dolomite section and presence of the oil/water contact;
- d) according to Yates' geologic interpretation, a well at McKay's proposed location should encounter approximately 80 feet of dolomite pay above the oil/water contact;
- e) a well at its proposed location should encounter approximately 154 feet of dolomite pay above the oil/water contact;
- f) a well at its proposed location should ultimately recover approximately 165,000 barrels of oil.

(11) In support of its contention that the E/2 of Section 25 is non-productive, Yates presented evidence which indicates that the Charolette McKay Federal Well No. 1, which was drilled in Unit H of Section 25, encountered no Canyon dolomite, and the Coquina "RS" Federal Well No. 1, drilled in Unit C of Section 25, encountered the dolomite pay section below the oil/water contact and was non-productive.

(12) McKay presented geologic and engineering evidence and testimony to support its contentions that:

- a) according to McKay's geologic interpretation, a well at its proposed location should encounter approximately 246 feet of gross dolomite pay, a well at Yates' proposed location should encounter approximately 400 feet of gross dolomite pay;
- b) within the gross dolomite interval, there are three distinct producing zones designated the "A", "B" and "C" intervals;
- c) the "A" interval is prone to gas production at both proposed locations. The "B" interval is prone to gas production at Yates' proposed location, but is prone to oil production at its proposed location. The "C" interval is prone to oil production at both proposed locations;

- d) a well at its proposed location should encounter a greater amount of net Dolomite (64 feet) in the "B" and "C" intervals than would a well at the Yates proposed location (37 feet);
- e) a well at its proposed location is the optimum location for protecting the NW/4 of Section 25 from offset drainage by the recently completed Yates Prickly Pear "AIE" Federal Com Well No. 1, located in Unit P of Section 23, which initially potentialled for 442 BOPD, 1652 BWPD and 1876 MCF gas per day;
- f) the E/2 of Section 25 should be non-productive from the "B" interval, but a substantial portion of the E/2 should be productive from the "A" and "C" intervals;
- g) a well at its proposed location should ultimately recover approximately 386,000 barrels of oil.

(12) McKay presented no evidence as to its estimated location of the oil/water contact in Section 25, but disputed the method by which Yates has determined its estimated location.

(13) In addition, McKay contends that the Coquina "RS" Federal Well No. 1, as described in Finding No. (11), was not tested for a sufficient length of time to properly evaluate the productive potential of the Canyon formation.

(14) The evidence presented in this case indicates that the geologic and reservoir characteristics of the Canyon dolomite reservoir underlying Section 25 are complex and are subject to various interpretations.

(15) Although the South Dagger Draw-Upper Pennsylvanian Associated Pool is spaced on 320 acres, evidence indicates that in the vicinity of the subject area, the pool has been effectively developed on 40-acre spacing.

(16) Both geologic interpretations indicate that either of the proposed well locations will be productive.

(17) McKay presented a more detailed and comprehensive interpretation and appears to have a better understanding of the Canyon dolomite reservoir underlying the subject acreage.

(18) McKay's location represents a logical stepout from known production and presents less of a risk than Yates' location.

(19) It is difficult to condemn the entire E/2 of Section 25 as non-productive inasmuch as according to testimony by Yates, wells can drop off structure significantly within one forty-acre location.

(20) The evidence presented indicates that while a well may not be drilled in the E/2 of Section 25, said area should contribute producible reserves to any well(s) drilled in the W/2.

(21) Irregardless of the orientation of the spacing units within Section 25, it is very likely that at least two wells will have to be drilled in the W/2 in order to adequately drain and develop the subject acreage.

(22) Approval of McKay's application will afford an opportunity for both Yates and McKay to each drill their preferred location within Section 25.

(23) To avoid the drilling of unnecessary wells, to protect correlative rights, to avoid waste, and to afford to the owner of each interest in said unit the opportunity to recover or receive without unnecessary expense his just and fair share of the production in any pool completion resulting from this order, the application of McKay Oil Corporation should be approved by pooling all mineral interests, whatever they may be, within said unit.

(24) The application of Yates Petroleum Corporation for compulsory pooling should be denied.

(25) McKay Oil Corporation should be designated the operator of the subject well and unit.

(26) Any non-consenting working interest owner should be afforded the opportunity to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production.

(27) Any non-consenting working interest owner who does not pay his share of estimated well costs should have withheld from production his share of the reasonable well costs plus an additional 125 percent thereof as a reasonable charge for the risk involved in the drilling of the well.

(28) Any non-consenting working interest owner should be afforded the opportunity to object to the actual well costs but actual well costs should be adopted as the reasonable well costs in the absence of such objection.

(29) Following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated costs should pay to the operator any amount that reasonable well costs exceed estimated well costs and should receive from the operator any amount that paid estimated well costs exceed reasonable well costs.

(30) \$5400.00 per month while drilling and \$540.00 per month while producing should be fixed as reasonable charges for supervision (combined fixed rates); the operator should be authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator should be authorized to withhold from production the proportionate share of actual expenditures required for operating the subject well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(31) All proceeds from production from the subject well which are not disbursed for any reason should be placed in escrow to be paid to the true owner thereof upon demand and proof of ownership.

(32) Upon the failure of the operator of said pooled unit to commence the drilling of the well to which said unit is dedicated on or before February 1, 1992, the order pooling said unit should become null and void and of no effect whatsoever.

(33) Should all the parties to this forced pooling order reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(34) The operator of the well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Yates Petroleum Corporation for an order pooling all mineral interests in the Undesignated South Dagger Draw-Upper Pennsylvanian Associated Pool underlying the W/2 of Section 25, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, forming a standard 320-acre oil or gas spacing and proration unit for said pool is hereby denied.

(2) All mineral interests, whatever they may be, in the Undesignated South Dagger Draw-Upper Pennsylvanian Associated Pool underlying the N/2 of Section 25, Township 20 South, Range 24 East, NMPM, Eddy County, New Mexico, are hereby pooled forming a standard 320-acre oil or gas spacing and proration unit for said pool. Said unit shall be dedicated to McKay Oil Corporation's proposed Charolette McKay Federal Well No. 2 to be drilled at a standard location 660 feet from the North and West lines (Unit D) of said Section 25.

**PROVIDED HOWEVER THAT**, the operator of said unit shall commence the drilling of said well on or before the 1st day of February, 1992, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Upper Pennsylvanian formation.

**PROVIDED FURTHER THAT**, in the event said operator does not commence the drilling of said well on or before the 1st day of February, 1992, Ordering Paragraph No. (1) of this order shall be null and void and of no effect whatsoever, unless said operator obtains a time extension from the Division Director for good cause shown.

**PROVIDED FURTHER THAT**, should said well not be drilled to completion, or abandonment, within 120 days after commencement thereof, said operator shall appear before the Division Director and show cause why Ordering Paragraph No. (1) of this order should not be rescinded.

(3) McKay Oil Corporation is hereby designated the operator of the subject well and unit.

(4) After the effective date of this order and within 90 days prior to commencing said well, the operator shall furnish the Division and each known working interest owner in the subject unit an itemized schedule of estimated well costs.

(5) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting working interest owner shall have the right to pay his share of estimated well costs to the operator in lieu of paying his share of reasonable well costs out of production, and any such owner who pays his share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges.

(6) The operator shall furnish the Division and each known working interest owner an itemized schedule of actual well costs within 90 days following completion of the 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 said schedule, the actual well costs shall be the reasonable well costs; provided however, if there is objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(7) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated well costs in advance as provided above shall pay to the operator his pro rata share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator his pro rata share of the amount that estimated well costs exceed reasonable well costs.

(8) The operator is hereby authorized to withhold the following costs and charges from production:

- (A) The pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.
- (B) As a charge for the risk involved in the drilling of the well, 125 percent of the pro rata share of reasonable well costs attributable to each non-consenting working interest owner who has not paid his share of estimated well costs within 30 days from the date the schedule of estimated well costs is furnished to him.

(9) The operator shall distribute said costs and charges withheld from production to the parties who advanced the well costs.

(10) \$5400.00 per month while drilling and \$540.00 per month while producing are hereby fixed as reasonable charges for supervision (combined fixed rates); the operator is hereby authorized to withhold from production the proportionate share of such supervision charges attributable to each non-consenting working interest, and in addition thereto, the operator is hereby authorized to withhold from production the proportionate share of actual expenditures required for operating such well, not in excess of what are reasonable, attributable to each non-consenting working interest.

(11) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for the purpose of allocating costs and charges under the terms of this order.



(12) Any well costs or charges which are to be paid out of production shall be withheld only from the working interest's share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

(13) All proceeds from production from the subject well which are not disbursed for any reason shall immediately be placed in escrow in Eddy County, New Mexico, to be paid to the true owner thereof upon demand and proof of ownership; the operator shall notify the Division of the name and address of said escrow agent within 30 days from the date of first deposit with said escrow agent.

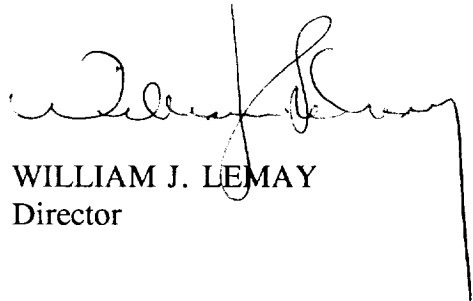
(14) Should all the parties to this forced pooling order reach voluntary agreement subsequent to entry of this order, this order shall thereafter be of no further effect.

(15) The operator of the well and unit shall notify the Director of the Division in writing of the subsequent voluntary agreement of all parties subject to the forced pooling provisions of this order

(16) 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

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