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. 11570 Order No R-

APPLICATION OF RICHARDSON OPERATING COMPANY FOR COMPULSORY POOLING, AN AN UNORTHODOX GAS WELL LOCATION AND DOWNHOLE COMMINGLING SAN JUAN COUNTY, NEW MEXICO.

RICHARDSON OPERATING COMPANY'S PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 11, 1996 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this _____ day of July, 1996, the Division Director, having considered the testimony, the recorded and the recommendations of the Examiner, and being fully advised in the premises,

<u>FINDS THAT</u>:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause, the parties herein and the subject matter thereof.

(2) The applicant, Richardson Operating Company ("Richardson"), seeks an order pooling all mineral interests in the Pictured Cliffs formation underlying the NE/4 of Section 15, T29N, R13W, NMPM, San Juan County, New Mexico forming a standard 160-acre gas spacing and

proration unit for production from the Fulcher Kutz-Pictured Cliffs Gas Pool or the West Kutz-Pictured Cliffs Gas Pool and all mineral interests in the Basin-Fruitland Coal-Gas Pool underlying the E/2 of said Section 15, thereby forming a standard 320-acre gas spacing and proration unit for said pool both to be dedicated to its ROPCO 15 GW "A" PC "B" FC Well No. 1 to be drilled and completed at an unorthodox gas well location 2171 feet from the North line and 775 feet from the East line (Unit H) of said Section 15. Applicant further seeks authorization to commingle Pictured Cliffs production with gas production from the Basin-Fruitland Coal Gas Pool within the wellbore of the proposed well.

(3) Richardson has proposed to all unleased mineral owners and working interest owners the formation of the subject spacing unit and drilling of the subject well and has obtained the voluntary agreement of more than 96% of the interest ownership in the 160-acre spacing unit and more than 91% of the interest ownership in the 320-acre spacing unit for the proposed well.

(4) Richardson, despite its good faith and diligent efforts undertaken over a reasonable period of time, has been unable to reach a voluntary agreement with the balance of the working interest owners and unleased mineral interest owners owning oil & gas mineral interests underlying this spacing unit concerning voluntary participation in the subject spacing unit and the proposed well.

(5) The E/2 of said Section 15 consists of some 76 different fee tracts all within the City of Farmington, State of New Mexico.

(6) In accordance with Division notice rules, Richardson has provided adequate notice to all interested and affected parties. No interested party appeared at the hearing in opposition to Richardson's application in this case.

(7) That Richardson has made a good faith effort to reach a voluntarily agreement with the appropriate parties and is entitled to compulsory pooling.

(8) Mr. Merrill Kempton, a royalty owner in the spacing unit and the owner of the surface at which the well is to be located has entered his appearance in this case in opposition to the applicant but failed to appear at either the July 11, 1996 or the July 25, 1996 hearings of this case. No other party has appeared in opposition to the applicant.

(9) Richardson's estimated cost for a completed well is \$236,616.00 with monthly overhead rates of \$3,500 while drilling and \$450 while producing.

(10) The Division's General Rule 104 is applicable to the Pictured Cliffs formation in this area and in order to provide for effective and efficient well spacing patterns in order to avoid the wasteful practice of drilling too many wells too close together in the same common source of supply, specifically requires that **both** Fruitland Coal Gas wells and Pictured Cliffs gas wells be located not closer than 790 feet to the outer boundary of their respective gas spacing units.

(11) Because of a combination of various surface use limitations imposed by "in-town drilling", Richardson is unable to locate its well at a standard location for this spacing unit, and therefore seeks the proposed unorthodox location which it anticipates will satisfy all the requirements of the City of Farmington.

(12) In support of its unorthodox well location, Richardson introduced an aerial photograph, tract maps and geologic evidence, including a stratigraphic cross-section and isopach map of the Upper Pictured Cliffs Sandstone which demonstrates that:

(a) the proposed unorthodox well location is due to surface topographical conditions and surface use limitations imposed by the City of Farmington;

(b) the proposed unorthodox well location will minimize surface disturbance within the NE/4 of Section 15 by being in close proximity to a well pad currently being used by Conoco Inc. for an existing Dakota well located in Unit H of Section 15;

(c) that in this instance there is no significant geological differences between the closest standard location and the proposed unorthodox location;

(d) Richardson's proposed location is the location for which Merrill Kempton, the surface owner of a large portion of this spacing unit, has the least objection; and

(e) Richardson's proposed unorthodox well location for its well provides a suitable well location for this spacing unit.

(13) The Division finds that an exception to the Division's well location requirements can be made in order to accommodate the City of Farmington and other in-town surface use restrictions because the geological information available supports the probability that the ultimate recovery of gas from the Pictured Cliffs and Fruitland Coal-Gas formations in this area should not be reduced in this case.

(14) Because the City of Farmington has not yet issued a permit to Richardson for this unorthodox well location, the Division should adopt a special administrative procedure in this case in order to provide for "drilling window" within which Richardson may relocate this unorthodox well location in the event the City of Farmington requires its relocation. Such a provision is necessary in order to avoid the undue regulatory burden imposed upon Richardson of having to reappear before a Division hearing examiner in order to modify this well location.

(15) Richardson' petroleum engineering witness testified that any location in the NE/4 of Section 15 is potentially subject to partial depletion thereby justifying the awarding of a 200% risk factor penalty against any non-consenting interest owners to fail to voluntary participation under this pooling order.

(16) The proposed unorthodox location does not sufficiently lessen the risk of the well and therefore the maximum 200% risk factor penalty should be applied in this case.

(17) Compulsory pooling is necessary and reasonable in this case to form a spacing unit for drilling, completing and producing the subject well.

(18) The applicant seeks authority to downhole commingle Fruitland coal and Pictured Cliffs gas production within the subject well for the following reasons:

(a) Applicant's testimony demonstrates the Fruitland Coal Gas is insufficient to economically justify a well solely for production from that formation;

(b) the producing characteristics of both formations will necessitate the installation of two artificial lift systems within a dually completed wellbore. This type of well completion presents certain mechanical difficulties; and

(c) the proposed downhole commingling is necessary in order for the applicant to most efficiently recover Fruitland coal-gas and Pictured Cliff gas reserves underlying each respective proration and spacing unit.

(19) The applicant further demonstrated through its evidence and testimony that:

(a) there should be no crossflow between the two commingled pools:

(b) neither commingled zone exposes the other to damage by produced fluids;

(c) the fluids from each zone are compatible with the other:

(d) while the ownership is each spacing unit is different, the allocation formula proposed by the applicant is fair and equitable and will afford each interest owner the right to receive its just and appropriate share of production;

> (e) the bottomhole pressure of the highest pressure zone should not be more than the original reservoir pressure of the lowest pressured zone;

> (f) the value of the commingled production is not less than the sum of the values of the individual production.

(20) The applicant has notified all interest owners owning an interest in either the Pictured Cliffs or Fruitland formation within the subject proration units of its proposed downhole commingling.

(21) Approval of the downhole commingling will allow the applicant the opportunity to recover the gas reserves in the Fruitland and Pictured Cliffs formations underlying each respective proration units thereby preventing waste and will not violate correlative rights.

(22) Subsequent to completion, the applicant proposes to conduct a production test on each of the subject zones in order to obtain initial production data.

(23) The production tests should be of sufficient duration in order to obtain stabilized producing rates. In addition, the applicant should notify the supervisor of the Aztec district office of the Division prior to conducting such production tests in order that such tests may be witnesses.

(24) The applicant should present the results of the production tests to the supervisor of the Aztec district office of the Division in order that the results may be verified and approved for use in its allocation formula.

(25) Due to the nature of the Basin-Fruitland Coal Gas production, straight allocation of gas volumes from both zones is not appropriate. The applicant therefore seeks the adoption of a monthly allocation formula, as shown on Exhibit "A" attached hereto and made a part hereof.

(26) The operator should be responsible for reporting the monthly gas production from said well by utilizing the proposed allocation formula.

(27) An annual report should be submitted by the operator to both the Aztec and Santa Fe offices of the Division showing the complete computation for each month.

(28) Any condensate production from the subject well should be allocated entirely to the Pictured Cliffs interval.

(29) Any change in the method of gas allocation between the two pools should be made only after due notice and hearing.

(30) To afford the Division an opportunity to asses the potential of waste and to expeditiously order the appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for seven consecutive days.

(31) Approval of this application as set forth in the above findings and in the following order will avoid the drilling unnecessary wells, protect correlative rights, prevent waste and afford 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 resulting from this order.

IT IS THEREFORE ORDERED THAT:

(1) All mineral interests, whatever they may be, in the Pictured-Cliffs formation underlying the NE/4 of Section 15, T29N, R13W, NMPM, San Juan County, New Mexico forming a standard 160-acre gas spacing and proration unit for production from the Fulcher Kutz-Pictured Cliffs Gas Pool or the West Kutz-Pictured Cliffs Gas Pool and all mineral interests in the Basin-Fruitland Coal-Gas Pool underlying the E/2 of said Section 15, thereby forming a standard 320-acre gas spacing and proration unit for said pools to be dedicated to its ROPCO 15 GW "A" PC "B" FC Well No. 1 to be drilled and completed at an unorthodox gas well location 2171 feet from the North line and 775 feet from the East line (Unit H) of said Section 15.

<u>PROVIDED HOWEVER THAT</u>, the operator is authorized to relocate this well at any surface location within a "drilling window" being an area within the NE/4 of Section 15 not closer than 790 feet to the north and west boundaries nor closer than 469 feet to the south boundary, nor closer than 775 feet to the east boundary of said quarter section.

<u>PROVIDED HOWEVER THAT</u>, the operator of said unit shall commence the drilling of said well on or before forty-five (45) days subsequent to it receiving final approval to drill from the City of Farmington, and shall thereafter continue the drilling of said well with due diligence to a depth sufficient to test the Pictured Cliffs formation.

<u>PROVIDED FURTHER THAT</u>, in the event said operator does not commence the drilling of said well on or before forty-five (45) days subsequent to it receiving final approval to drill from the City of Farmington, Decretory 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 for good cause shown.

<u>PROVIDED FURTHER THAT</u>, 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 Decretory Paragraph No. (1) of this order should not be rescinded.

(2) Subsequent to completion, the applicant shall conduct a production test on each of the subject zones in order to obtain initial stabilized producing rates. In addition, the applicant shall notify the supervisor of the Aztec district office of the Division prior to conducting such production tests in order that such test may be witnessed.

(3) The applicant shall present the results of the production tests to the supervisor of the Aztec district office of the Division in order that the results may be verified and approved for use in its allocation formula.

(4) The allocation of gas produced from both zones shall be in accordance with the allocation formula adopted for this well as further described in Exhibit "A" attached hereto and made a part hereof.

(5) The operator is responsible for reporting the monthly gas production from the subject well to the Division by utilizing the allocation formula adopted herein. An annual report shall be submitted by the operator to both the Aztec and Santa Fe offices of the Division showing the complete computation for the previous twelve month period.

(6) Condensate production from the subject well shall be allocated entirely to the Pictured Cliffs formation. Water production shall e reported in a manner acceptable to the supervisor of the Aztec district office of the Division.

(7) Any variance in the method of gas allocation between the two pools shall be made only after due notice and hearing.

(8) The operator shall immediately notify the Aztec district office of the Division any time the subject well has been shut-in for seven consecutive days and shall concurrently present to the Division a plan for remedial action.

(9) Any change in the method of gas allocation between the two pools should be made only after due notice and hearing.

(10) Richardson Operating Company is hereby designated the operator of the subject well and unit.

(11) After the effective date of this order and prior to commencing said well, the operator shall furnish the Division and each known unleased mineral owner and/or uncommitted working interest owner in the subject unit an itemized schedule of estimated well costs.

(12) Within 30 days from the date the schedule of estimated well costs is furnished to him, any non-consenting unleased mineral owner or uncommitted 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.

(13) The operator shall furnish the Division and each known unleased mineral owner or 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 cost 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 an objection to actual well costs within said 45-day period the Division will determine reasonable well costs after public notice and hearing.

(14) Within 60 days following determination of reasonable well costs, any non-consenting working interest owner who has paid his share of estimated 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.

(15) 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 of schedule of estimated well costs is furnished to him; and
- B. As a charge for the risk involved in the drilling of the well, 200 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 costs is furnished to him.

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

(17) \$3,500 per month while drilling and \$450 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 nonconsenting 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. The operator is hereby authorized to make annual adjustments of said combined fixed rates as of the first day of April each year in accordance with the COPAS accounting schedule utilized by the industry.

(18) Any unleased mineral interest shall be considered a seveneighths (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.

(19) 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.

(20) All proceeds from production from the subject well which are not disbursed for any reason shall be placed in escrow in San Juan 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.

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

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

(23) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director