

Entered July 1, 1975  
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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. 5505  
Order No. R-4549-C

THE APPLICATION OF THE ATLANTIC  
RICHFIELD COMPANY FOR PRESSURE  
MAINTENANCE PROJECT EXPANSION,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 10, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 1st day of July, 1975, 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:

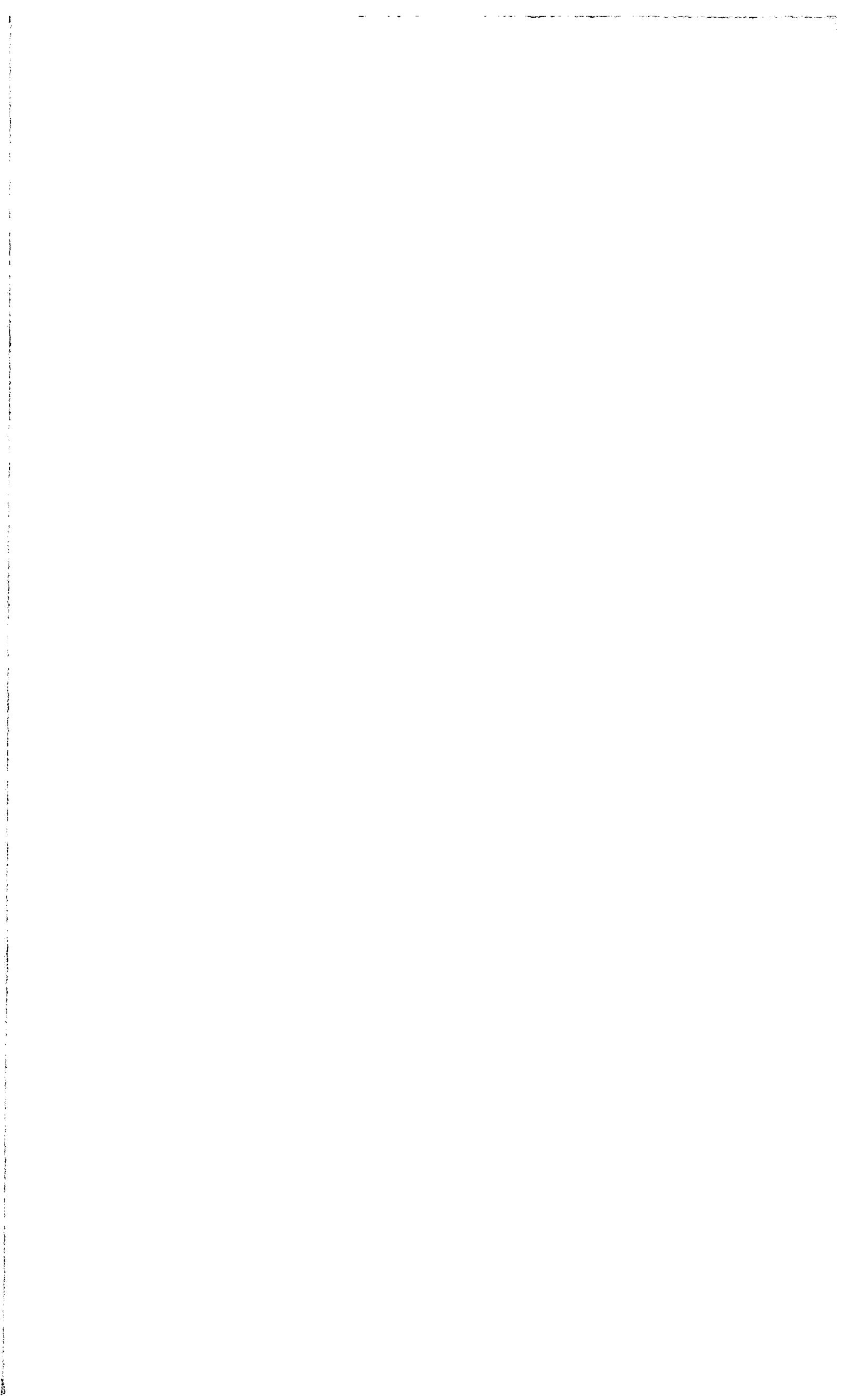
(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, The Atlantic Richfield Company, is the operator of the Empire-Abo Pressure Maintenance Project, Empire-Abo Pool, Eddy County, New Mexico, which project was authorized by Commission Order No. R-4549, expanded by Order No. R-4549-A, and is operated pursuant to Special Rules and Regulations promulgated by Order No. R-4549, as amended by Orders Nos. R-4549-A and R-4549-B.

(3) That the applicant seeks the further expansion of the pressure maintenance project area as defined by said Order No. R-4549 and expanded by said Order No. R-4549-A by the inclusion of the following described lands, which are to be committed to the Empire Abo Unit Area:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 27: SE/4 SW/4, being 40.00 acres

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 4: NE/4 NE/4, being 40.03 acres  
Section 5: SE/4 NW/4, being 40.00 acres



(4) That in conjunction with the expansion of said project area, applicant also seeks the amendment of Rule 3 of the Special Rules and Regulations for the Empire Abo Pressure Maintenance Project as promulgated by Order No. R-4549 and amended by Orders Nos. R-4549-A and R-4549-B to provide that the maximum daily project allowable will result in average daily reservoir voidage no greater than the reservoir voidage in the project area, as expanded, for calendar year 1972 (56,912 reservoir barrels) or 33,242 barrels of oil per day, whichever is less, except that when injection of 95 percent of all available residue gas is achieved, the project allowance would be an amount of oil no greater than would result in average daily reservoir voidage in the project area, as expanded, for calendar year 1972 (56,912 reservoir barrels) or 41,041 barrels of oil per day, whichever is less.

(5) That to accomplish the aforesaid increase in project base allowable and maximum project allowable, certain modifications to Rule 4 of the project rules would be necessary.

(6) That the proposed expansion of the Empire-Abo Pressure Maintenance Project Area and the concurrent increase in base allowable and maximum project allowable is in the interest of increased recovery of oil and gas, will prevent waste and will not violate correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the project area for the Empire-Abo Pressure Maintenance Project is hereby expanded to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 27: SE/4 SW/4

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 4: NE/4 NE/4  
Section 5: SE/4 NW/4

being 120.03 acres, all in Eddy County, New Mexico.

(2) That Rule 3 of the Special Rules and Regulations for the Empire-Abo Pressure Maintenance Project as promulgated by Order No. R-4549, as amended by Orders Nos. R-4549-A and R-4549-B, is hereby amended to read in its entirety as follows:

"RULE 3. That the maximum daily project allowable shall be an amount of oil which will result in reservoir voidage no greater than the average daily reservoir voidage in the project area for calendar year 1972 (56,912 reservoir barrels) or 33,242 barrels of oil per day,

whichever is less, except that when injection of 95 percent of all available residue gas is achieved, the maximum daily project allowable shall be an amount of oil which will result in reservoir voidage no greater than the average daily reservoir voidage in the project area for calendar year 1972 (56,912 reservoir barrels) or 41,041 barrels of oil per day, whichever is less."

(3) That Rule 4 of the Special Rules and Regulations for the Empire-Abo Pressure Maintenance Project is hereby amended to read in its entirety as follows:

"RULE 4. That upon commencement of gas injection and for as long thereafter as such injection continues, extra allowable in addition to the 33,242 barrels per day described above may be assigned to the project area, provided that such additional allowable shall be based upon the proportion of residue gas available for injection which is actually injected into the unitized formation and shall be computed in accordance with the following formula:

$$\begin{aligned} \text{Additional Allowable} \\ \text{in Excess of 33,242} &= 41.05 \left[ 2 \left( \frac{\text{MCF gas inj. previous month} \times 10}{\text{MCF residue gas available prev. month}} \right) \right]^2 \\ \text{BOPD} &+ \left( \frac{\text{MCF gas inj. previous month} \times 10}{\text{MCF residue gas available previous month}} \right) \end{aligned} \quad 2$$

That the maximum additional allowable which may be earned by gas injection shall be 7,799 barrels per day. That this maximum may be earned by the injection of 95 percent of the available residue gas into the unitized formation; that gas volumes in excess of said 95 percent which are injected into the unitized formation shall be credited each month to a gas injection bank account which shall be permitted to accrue such gas injection credits up to 100 percent of the average of the total monthly injection volumes for the three previous months, not including the month being reported; that during such times as injection well failures, injection plant shutdowns, and other temporary conditions of unforeseen nature which prevent the injection of at least 95 percent of the available residue gas, said gas injection bank account may be charged a sufficient volume to add to the actual volume of injection achieved to equal 95 percent of the available residue gas for the month. In the event there are insufficient credits accrued to the

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gas injection bank account to bring actual injection plus applied credits up to 95 percent of available residue gas, production shall be reduced to 33,242 barrels of oil per day plus the amount which the actual injection plus the accrued credits will actually earn. Production beyond this amount shall be considered overproduction and shall be compensated for by underproduction during the following month.

For the purpose of these rules, "Available Residue Gas" shall be defined as being all gas produced from the unitized formation less plant shrinkage, plant fuel, and lease fuel required for operation of the lease.

No raw gas nor plant residue gas attributable to the project shall be sold or otherwise disposed of by any means other than injection into the unitized formation except during emergency situations of temporary nature."

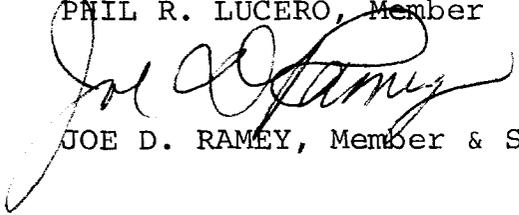
(4) That the effective date of this order shall be the effective date of ratification of the unit agreement by the parties concerned.

(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

  
PHIL R. LUCERO, Member

  
JOE D. RAMEY, Member & Secretary

S E A L

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