STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 8502 <u>DE NOVO</u> Order No. R-8000-A

APPLICATION OF YATES DRILLING COMPANY FOR A PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 17, 1985, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 19th day of November, 1985, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Yates Drilling Company, seeks authority to institute a pressure maintenance project in the Southeast Chaves Queen Area Associated Pool by the injection of water into the Queen formation through a perforated interval from approximately 2991 feet to approximately 2997 feet in its Doyal Well No. 3 located 1980 feet from the South line and 990 feet from the East line of Section 27, Township 12 South, Range 31 East, NMPM, Chaves County, New Mexico.
- (3) The matter came on for hearing at 8 a.m. on March 13, 1985, at Santa Fe, New Mexico, before Oil Conservation Division (Division) Examiner Gilbert P. Quintana and, pursuant to his hearing, Order No. R-8000 was issued on August 8, 1985, which

denied the application because no evidence was presented that correlative rights would be adequately protected under the proposed plan of operation.

- (4) On August 16, 1985, application for Hearing $\underline{\text{De}}$ Novo was made by Yates Drilling Company and the matter was set for hearing before the Commission.
- (5) The matter came on for hearing $\underline{\text{de}}$ $\underline{\text{novo}}$ on October 17, 1985.
- (6) The applicant presented evidence which demonstrated that the proposed pressure maintenance project would result in recovery of otherwise unrecoverable oil, thereby preventing waste.
- (7) The applicant did not propose unitization of the area, the development of lease line agreements, or any other method of protecting the correlative rights of the owners of differing royalty interests in the area of the proposed injection well.
- (8) The owners of royalty interests under the Doyal leases in the area of the proposed injection well appeared and objected to the proposed pressure maintenance project.
- (9) Said objections were based upon contentions that oil would be swept off Doyal leases to other leases and that the Doyle's would not be compensated for such loss in any manner.
- (10) Institution of the pressure maintenance program as proposed by the applicant will prevent waste but will not assure protection of correlative rights.
- (11) To prevent waste, the application for institution of a pressure maintenance project should be approved.
- (12) To protect correlative rights, the applicant should be required to unitize the area to be encompassed by the project, develop lease line agreements, or otherwise develop a plan of operation of the proposed project which will protect the correlative rights of the owners therein.
- (13) The requirements under Finding No. (12) above should be met within one year of initial injection into the proposed project or the authority to inject should expire.
- (14) Prior to commencing injection operations, the casing in the subject well should be pressure-tested throughout the

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interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

- (15) The injection well or system should be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than $600~\rm psi$.
- (16) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such higher pressure will not result in migration of the injected waters from the injection interval.
- (17) The operator should give advance notification to the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure test in order that the same may be witnessed.
- (18) The operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.
- (19) Approval of the subject application subject to the terms and conditions set out above will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Yates Drilling Company, is hereby authorized to institute a pilot pressure maintenance project in the Southeast Chaves Queen Area Associated Pool, by the injection of water into the Queen formation through the perforated interval from 2991 feet to 2997 feet in its Doyal Well No. 3 located 1980 feet from the South line and 990 feet from the East line of Section 27, Township 12 South, Range 31 East, Chaves County, New Mexico.
- (2) Injection into said well shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.
- (3) The operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the

tubing or packer in said injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

- (4) The injection well herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 600 psi, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.
- (5) The subject pressure maintenance project is hereby designated the Yates Doyal Pilot Pressure Maintenance Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.
- (6) The applicant shall notify the Director of the Division of the date injection begins in said project.
- (7) This case shall be reopened approximately one year from the date of such initial injection at which time the operator shall appear and present a plan of project operation and development which will provide for water injection credits, allocation of project allowable, and protection of correlative rights.
- (8) If the operator does not present such a plan or if such plan should be rejected by the Division, the authority for injection into the pilot project shall terminate.
- (9) Monthly progress reports of the pilot project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.
- (10) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JIM BACA, Member

ED KELLEY, Member

R. L. STAMETS, Chairman and Secretary

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