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. 11236 Order No. R-10349

APPLICATION OF YATES PETROLEUM CORPORATION FOR A PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on April 6, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 13th day of April, 1995, 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) The applicant, Yates Petroleum Corporation, seeks authority to institute a pressure maintenance project on a portion of its Quincy "AMQ" State Lease comprising the NW/4 of Section 12, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico, by the injection of water into the P-1 porosity zone of the San Andres formation, Southeast Acme-San Andres Pool, through the perforated interval from approximately 2,162 feet to 2,182 feet in its Quincy "AMQ" State Well No. 8 located 2310 feet from the North and West lines (Unit F) of said Section 12.
- (3) The Southeast Acme-San Andres Pool was created by Division Order No. R-9837 on January 27, 1993. The pool was discovered by the Elk Oil Company Celtic State Well No. 1 located in Unit E of Section 13, Township 8 South, Range 27 East, NMPM.
- (4) The NW/4 of Section 12 is currently being actively developed in the Southeast Acme-San Andres Pool by the applicant who currently operates seven producing wells.

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- (5) Division records indicate that the Quincy "AMQ" State Well No. 8 was drilled by the applicant in March, 1995, to test the San Andres formation. According to applicant's testimony, the well proved non-commercial in the Southeast Acme-San Andres Pool.
- (6) Applicant seeks authority to utilize the subject well for injection in order to provide pressure support to wells in this portion of the field.
- (7) According to applicant's testimony, its Quincy "AMQ" State Well Nos. 6 and 7, both located in Unit F, will likely be the only producing wells to benefit from the proposed injection.
- (8) The proposed pressure maintenance project should result in the recovery of otherwise unrecoverable oil from this portion of the field.
- (9) Applicant testified that it has no plans at this time to expand injection into other areas of the field.
- (10) The pressure maintenance project area should be limited to the SE/4 NW/4 of Section 12.
- (11) The injection of water into the proposed injection well should be accomplished through 2 7/8-inch internally plastic-lined tubing installed in a packer set at approximately 2,100 feet; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.
- (12) Prior to commencing injection operations into the subject well, the casing should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (13) The injection well or pressurization system should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 432 psi.
- (14) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the pressure limitation described above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.
- (15) The operator should give advance notification to the supervisor of the Artesia 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.

(16) The proposed pressure maintenance project should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

- (17) The oil allowable for the subject pressure maintenance project should be established at 80 barrels of oil per day.
- (18) The injection authority granted herein for the Quincy "AMQ" State Well No. 8 should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Yates Petroleum Corporation, is hereby authorized to institute a pressure maintenance project on a portion of its Quincy "AMQ" State Lease comprising the SE/4 NW/4 of Section 12, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico, by the injection of water into the P-1 porosity zone of the San Andres formation, Southeast Acme-San Andres Pool, through the perforated interval from approximately 2,162 feet to 2,182 feet in its Quincy "AMQ" State Well No. 8 located 2310 feet from the North and West lines (Unit F) of said Section 12.
- (2) The applicant shall 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 from injection, production, or plugged and abandoned wells.
- (3) Injection into the Quincy "AMQ" State Well No. 8 shall be accomplished through 2 7/8-inch plastic-lined tubing installed in a packer set at approximately 2,100 feet; the casing-tubing annulus shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.
- (4) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 432 psi.
- (5) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

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- (6) Prior to commencing injection operations into the Quincy "AMQ" State Well No. 8, the casing shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.
- (7) The operator shall give advance notification to the supervisor of the Artesia 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.
- (8) The applicant shall immediately notify the supervisor of the Artesia District Office of the Division of the failure of the tubing, casing or packer in the 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 steps as may be timely and necessary to correct such failure or leakage.
- (9) The subject waterflood project is hereby designated the Quincy "AMQ" San Andres Pressure Maintenance Project, and the applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.
- (10) The oil allowable for the Quincy "AMQ" San Andres Pressure Maintenance Project is hereby established at 80 barrels of oil per day.
- (11) The injection authority granted herein for the Quincy "AMQ" State Well No. 8 shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.
- (12) 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