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. 11347 Order No. R-10349-A

APPLICATION OF YATES PETROLEUM CORPORATION FOR AMENDMENT OF DIVISION ORDER NO. R-10349 FOR EXPANSION OF THE QUINCY "AMQ" SAN ANDRES PRESSURE MAINTENANCE PROJECT, FOR QUALIFICATION OF THIS PROJECT FOR THE RECOVERED OIL TAX CREDIT PURSUANT TO THE "NEW MEXICO ENHANCED OIL RECOVERY ACT", AND FOR PRESSURE MAINTENANCE EXPANSION, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on July 27, 1995, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 2nd day of August, 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) By Order No. R-10349 issued in Case No. 11236 on April 13, 1995, the Division authorized Yates Petroleum Corporation to institute a pressure maintenance project within the SE/4 NW/4 of Section 12, Township 8 South, Range 27 East, NMPM, being a portion of its Quincy "AMQ" State Lease (V-2982), 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 applicant, Yates Petroleum Corporation, seeks to amend Division Order No. R-10349 in the following manner:
 - a) authorize injection authority for its Quincy "AMQ" State Well No.
 9 located 2310 feet from the North line and 2310 feet from the East line (Unit G) of Section 12;
 - b) cancel injection authority previously granted to the Quincy "AMQ" State Well No. 8:
 - c) expand the Quincy "AMQ" San Andres Pressure Maintenance Project to include all of the following described 400 acres, more or less, in Section 12, Township 8 South, Range 27 East, NMPM:

W/2 NE/4, NW/4, E/2 SW/4, W/2 SE/4

- d) certify the Quincy "AMQ" San Andres Pressure Maintenance Project as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (4) The applicant has previously demonstrated (Case No. 11236) that the subject pressure maintenance project should result in the recovery of otherwise unrecoverable oil from this portion of the field, thereby preventing waste.
 - (5) The evidence and testimony presented in the immediate case indicates that:
 - a) applicant has never utilized the aforesaid Quincy "AMQ" State Well No. 8 as an injection well. This well is currently being utilized as a producing well;
 - b) the Quincy "AMQ" State Well No. 9 was recently drilled as a producing well, however, this well is making nearly 100% water;
 - c) injection into the Quincy "AMQ" State Well No. 9 will likely benefit production in the Quincy "AMQ" State Well Nos. 6, 7, 8 and 10 only;
 - d) applicant has no immediate plans to convert additional wells to injection within the subject pressure maintenance project; and,

- e) the Quincy "AMQ" San Andres Pressure Maintenance Project meets the criteria for certification as an "Enhanced Oil Recovery Project".
- (6) The Quincy "AMQ" San Andres Pressure Maintenance Project should comprise the SW/4 NE/4, SE/4 NW/4 and the NE/4 SW/4 of Section 12, being the area which contains the Quincy "AMQ" State Well Nos. 6, 7, 8, 9 and 10.
- (7) The Quincy "AMQ" San Andres Pressure Maintenance Project Area may be expanded administratively by the Division Director should the applicant add additional injection wells.
- (8) The applicant should be authorized to utilize its Quincy "AMQ" State Well No. 9 as an injection well, injection to occur into the P-1 porosity zone of the San Andres formation through the perforated interval from approximately 2,184 feet to 2,229 feet.
- (9) The injection of water into the Quincy "AMQ" State Well No. 9 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.
- (10) 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.
- (11) Prior to commencing injection operations into the Quincy "AMQ" State Well No. 9, the applicant should be required to temporarily abandon or plug and abandon the Yates Petroleum Corporation Carl "ANO" State Well No. 1 located 330 feet from the South line and 2310 feet from the East line (Unit O) of Section 1, Township 8 South, Range 27 East, NMPM, in a manner satisfactory to the supervisor of the Division's Artesia district office in order to assure that said wellbore will not serve as a conduit for the migration of injected fluid.
- (12) 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 437 psi.
- (13) 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.

- (14) 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.
- (15) The proposed amendment of Division Order No. R-10349 should be approved and the Quincy "AMQ" San Andres Pressure Maintenance Project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.
- (16) The oil allowable for the subject pressure maintenance project should be established at 240 barrels of oil per day.
- (17) The injection authority granted herein for the Quincy "AMQ" State Well No. 9 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.
- (18) The injection authority previously granted for the Quincy "AMQ" State Well No. 8 should be <u>cancelled</u>.
- (19) The certified "project area" should initially comprise the area described in Finding No. (6) above, provided however, the "project area" and/or the producing wells eligible for the recovered oil tax rate may be contracted and reduced dependent upon the evidence presented by the applicant in its demonstration of the occurrence of a positive production response.
- (20) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.
- (21) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

IT IS THEREFORE ORDERED THAT:

- (1) Division Order No. R-10349 dated April 13, 1995, is hereby amended in the manner set forth as follows:
- (2) 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 SW/4 NE/4, SE/4 NW/4 and the NE/4 SW/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 2,184 feet to 2,229 feet in its Quincy "AMQ" State Well No. 9 located 2310 feet from the North and East lines (Unit G) of said Section 12.
- (3) 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.
- (4) Injection into the Quincy "AMQ" State Well No. 9 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.
- (5) 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 437 psi.
- (6) Prior to commencing injection operations into the Quincy "AMQ" State Well No. 9, the applicant shall temporarily abandon or plug and abandon the Yates Petroleum Corporation Carl "ANO" State Well No. 1 located 330 feet from the South line and 2310 feet from the East line (Unit O) of Section 1, Township 8 South, Range 27 East, NMPM, in a manner satisfactory to the supervisor of the Division's Artesia district office in order to assure that said wellbore will not serve as a conduit for the migration of injected fluid.
- (7) 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.
- (8) Prior to commencing injection operations into the Quincy "AMQ" State Well No. 9, 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.

- (9) 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.
- (10) 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.
- (11) The subject 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.
- (12) The oil allowable for the Quincy "AMQ" San Andres Pressure Maintenance Project is hereby established at 240 barrels of oil per day.
- (13) The injection authority granted herein for the Quincy "AMQ" State Well No. 9 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.
- (14) The subject pressure maintenance project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).
- (15) The approved "project area" shall initially comprise the area described in Finding No. (6) above.
- (16) To be eligible for the EOR credit, prior to commencing injection operations, the operators must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

- (17) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the operators must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operators believe are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.
- (18) The injection authority previously granted by Order No. R-10349 to the applicant to utilize its Quincy "AMQ" State Well No. 8 located 2310 feet from the North and West lines (Unit F) of said Section 12, is hereby <u>cancelled</u>.
- (19) 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. LAMAY

Director

