

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7595
Order No. R-7023

APPLICATION OF HARVEY E. YATES
COMPANY FOR A WATERFLOOD PROJECT,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 26, 1982, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of July, 1982, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Harvey E. Yates Company, seeks authority to institute a pilot waterflood project in the North Young-Bone Spring Pool by the injection of water into the perforated interval from 8444 feet to 8488 feet in its Young Deep Unit Well No. 2, located in Unit C of Section 10, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico. Applicant would also inject into certain as yet undetermined selective intervals between the depths of 8500 feet and 8507 feet.

(3) That the wells in the proposed project are not in an advanced state of depletion and may not properly be classified as "stripper" wells.

(4) That although the proposed project does not fit the definition of a waterflood project contained in Rule 701 F.1 of the Division Rules and Regulations, it does fit the definition of a pressure maintenance project contained in Rule 701 E.1 of the Division Rules and Regulations.

(5) That the proposed project should be classified as a pressure maintenance project and, in accordance with Rule 701 E., project rules, including the allowable formula, promulgated therefor.

(6) That the proposed pressure maintenance project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste, and will not impair correlative rights.

(7) That the initial project area should comprise the following described lands within applicant's proposed Young Deep (Bone Spring) Unit Area, Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 3: S/2 SW/4 and W/2 SE/4
Section 4: SE/4 SE/4
Section 9: NE/4 NE/4
Section 10: N/2 NW/4 and NW/4 NE/4

(8) That the project area should be expanded upon completion of additional injection wells or producing wells in the Bone Spring formation in the proposed Young Deep (Bone Spring) Unit Area which may be shown to be affected by the injection program.

(9) That the project allowable should be equal to top unit allowable for the North Young-Bone Spring Pool times the number of developed (production or injection) proration units within the project area.

(10) That the transfer of allowable between wells within the project area should be permitted.

(11) That 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 from injection, production, or plugged and abandoned wells including the recementing of the 4 1/2-inch casing string back to at least 7900 feet when the Young Deep "4" Federal Well No. 1 in Unit M of Section 3, Township 18 South, Range 32 East, NMPM, is plugged back.

(12) That the injection wells or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 1690 psi, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(13) That the subject application should be approved and the project should be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Harvey E. Yates Company, is hereby authorized to institute a pressure maintenance project in the North Young-Bone Spring Pool by the injection of water into selected perforated intervals between the depths of 8444 feet and 8597 feet in its Young Deep Unit Well No. 2, located in Unit C of Section 10, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That 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; that the casing-tubing annulus of said injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in any injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around 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) That 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 1690 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) That the subject pressure maintenance project is hereby designated the North Young-Bone Spring Pressure Maintenance Project and shall be governed by Special Rules and by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(6) That Special Rules and Regulations governing the operation of the North Young Bone Spring Pressure Maintenance Project are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH YOUNG BONE SPRING PRESSURE MAINTENANCE PROJECT

Rule 1. That the initial project area shall comprise the following described lands in Lea County, New Mexico:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 3: S/2 SW/4 and W/2 SE/4
Section 4: SE/4 SE/4
Section 9: NE/4 NE/4
Section 10: N/2 NW/4 and NW/4 NE/4

Rule 2. That the project area may be expanded administratively within the applicant's proposed Young Deep (Bone Spring) Unit Area by the Division Director upon completion of additional injection wells or production wells, provided it can be shown that such production wells are affected by the injection of water into the Bone Spring formation.

Rule 3. The allowable for the project area shall be any amount up to and including a volume equal to the top unit allowable for the North Young-Bone Spring Pool times the number of proration units in the project area.

Rule 4. The allowable assigned to the project area may be produced from any well or wells within the project area in any proportion.

Rule 5. The Division Director is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the proposed Young Deep (Bone Spring) Unit Area as may be necessary to complete an efficient production and injection pattern, provided said producing wells are drilled no closer than 330 feet to the outer boundary of said unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary. To obtain such approval, the project operator shall file proper application with the Division, which application, if it seeks authorization to convert additional wells to injection or to drill additional production or injection wells shall include the following:

(a) A plat identifying the lands committed to the unit agreement and those lands not committed to said agreement, and showing the location of the proposed well, all wells within the unit area, and offset operators.

(b) A schematic drawing of any proposed injection well which fully describes the casing, tubing, packer, monitoring equipment, perforated interval, and depth.

(c) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.

(d) Such other applicable requirements as may be contained in Rule 701 of the Division Rules and Regulations.

The Division Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Director may grant immediate approval, provided waivers of objection are received from all offset operators.

(7) That the pressure maintenance project herein authorized shall be governed by the provisions of Rules 702 through 708 of the Division Rules and Regulations.

(8) That 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


JOE D. RAMEY,
Director

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