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. 5787 Order No. R-5318

APPLICATION OF BOYD OPERATING COMPANY FOR A WATERFLOOD PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1976, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this 4th day of November, 1976, 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, Boyd Operating Company, seeks authority to institute a waterflood project on its Robinson and Brinson Leases, Grayburg-Jackson Pool, by the injection of water into the Grayburg formation through its Robinson Well No. 8 located in Unit N of Section 25 and its Brinson Wells Nos. 2 and 3 located, respectively, in Units A and G of Section 36, all in Township 16 South, Range 31 East, NMPM, Eddy County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.
- (5) That the Robinson Well No. 6 in Unit J of said Section 25 and the Carper Drilling Company Taylor Well No. 1 in Unit M of Section 30, Township 16 South, Range 32 East, NMPM, are two plugged and abandoned wells which offset proposed injection wells and are not plugged and abandoned in such a manner as to assure

that they will not serve as channels for injected water to migra from the Grayburg formation to other formations or the surface.

- (6) That to prevent the migration of water from the Grayburg formation through said Robinson Well No. 6 and said Taylor Well No. 1, said wells should be recompleted as producing or injection wells in the Grayburg formation or replugged in accordance with Commission approved programs within one year after initiation of injection under pressure within the project.
- (7) That the wells within the project should be equipped to facilitate periodic testing of the annular space between strings of production and surface casing.
- (8) 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.
- (9) That an administrative procedure should be established whereby additional injection and producing wells at orthodox and unorthodox locations in the project area may be approved without notice and hearing.
- (10) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Boyd Operating Company, is hereby authorized to institute a waterflood project on its Robinson, Brinson and Taylor Leases in Sections 25 and 36, Township 16 South, Range 31 East, and Section 30, Township 16 South, Range 32 East, NMPM, Grayburg-Jackson Pool, by the injection of water into the Grayburg formation through the following-described wells all in Township 16 South, Range 31 East, NMPM, Eddy County, New Mexico:

LEASE NAME	WELL NO.	UNIT	SECTION
Robinson	8	N	25
Brinson	2	A	36
Brinson	3	G	36

(2) That injection into each of said wells should 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 each injection well shall be tested for leaks, be loaded with an inert fluid and equipped with an approve pressure gauge or attention-attracting leak detection device, and that the injection wells or system shall be equipped in such a manner as to limit wellhead pressure to no more than 1050 psi.

- (3) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of 1050 psi upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.
- (4) That the wells within the project area shall be equipped with risers or in another acceptable manner such as to facilitate the periodic testing of the bradenhead for pressure or fluid production.
- visor of the appropriate Commission district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, the leakage of water or oil from any plugged and abandoned well within the project area or any other evidence of fluid migration from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.
- (6) That within one year after initiation of injection under pressure greater than hydrostatic pressure into injection wells within the project directly or diagonally offsetting the wells listed below, such wells must be recompleted as producing or injection wells or be replugged in accordance with a Commission approved program:

LEASE	WELL NO.	UNIT	SECTION-TOWNSHIP-RANGE
Robinson	6	J	25-16S-31E
Taylor	1	M	30-16S-32E

- (7) That the subject waterflood project is hereby designated the Boyd Operating Company Robinson Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.
- (8) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (9) The Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of applicant's Robinson, Brinson, or Taylor leases in said Sections 25, 36, and 30 as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 330 feet to any lease line 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 Commission, 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 showing the location of proposed well, all wells within the project area, and offset operators, locating wells which offset the project area.
- (b) A schematic drawing of the proposed well which fully describes the casing, tubing, perforated interval, depth, and a demonstration that any proposed injection well will meet construction, pressure, and monitoring provisions of Order (2), (3), and (4) of this Order or the equivalent.
- (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.

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

(10) 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, Chairman

EMERY C. ARNOLD Member

OE D. RAMEY, Member & Secretary

SEAL