

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. 8418
Order No. R-7900

APPLICATION OF PHILLIPS OIL COMPANY
FOR A WATERFLOOD PROJECT, EDDY
COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on November 28, 1984, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 25th day of April, 1985, 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, Phillips Oil Company, seeks authority to institute a cooperative waterflood project in the Grayburg-Jackson Pool by the injection of water into the Grayburg and San Andres formations through selected perforated intervals from approximately 2300 feet to 3500 feet in 23 existing wells, as described in Exhibit "A" attached hereto and made a part hereof, all located on the applicant's Keely "A" Federal, Keely "B" Federal, Keely "C" Federal, Burch "BB" Federal, Burch "C" Federal, and Dexter Federal Leases in Sections 23, 24, 25, and 26, Township 17 South, Range 29 East, NMPM, and Sections 19 and 30, Township 17 South, Range 30 East, NMPM, in Eddy County, New Mexico.

(3) The wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

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(4) The proposed cooperative waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) 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.

(6) There are two temporarily abandoned wells within the area of the proposed waterflood project that may require remedial work prior to the commencement of injection operations in a portion of the project area, those wells being the Phillips Petroleum Company Grayburg Deep Unit Wells Nos. 4 and 6 located 1946 feet from the South line and 662 feet from the West line (Unit L) and 330 feet from the North line and 1980 feet from the West line (Unit C), respectively, both in Section 30, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

(7) The injection wells or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 0.2 psi, per foot of depth to the top of the uppermost perforation, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

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

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Phillips Oil Company, is hereby authorized to institute a cooperative waterflood project on its Keely "A" Federal, Keely "B" Federal, Keely "C" Federal, Burch "B" Federal, Burch "BB" Federal, Burch "C" Federal and Dexter Federal Leases, Grayburg-Jackson Pool, by the injection of water into the Grayburg and San Andres formations through 23 existing wells, as described in Exhibit "A" attached hereto and made a part hereof, in Eddy County, New Mexico.

(2) Injection into each of said wells 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.

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(3) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in any of said injection wells, 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 wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 0.2 psi per foot of depth to the uppermost perforation of each well, provided however, the Division Director may authorize a higher surface injection pressure upon application and satisfactory showing that such pressure will not result in fracturing of the confining strata.

(5) The subject cooperative waterflood project is hereby designated the Phillips Burch-Keely Cooperative Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(6) Monthly progress reports of the cooperative waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(7) Injection into the following described three injection wells shall not commence until the Phillips Oil Company Grayburg Deep Unit Wells Nos. 4 and 6 located 1946 feet from the South line and 662 feet from the West line (Unit L) and 330 feet from the North line and 1980 feet from the the West line (Unit C), respectively, both in Section 30, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico, have been completed in such a manner as to ensure that they do not provide an avenue of escape for the injected fluids from the proposed zone of interest and that is satisfactory to the supervisor of the Division's district office at Artesia:

<u>WELL NAME AND NO.</u>	<u>FOOTAGE LOCATION (UNIT)</u>	<u>SECTION-TOWNSHIP RANGE</u>
Burch "BB" Fed. Well No. 6	660' FS & WL (M)	19-17S-30E
Keely "C" Fed. Well No. 20	1980' FSL -660'FEL (I)	25-17S-29E
Burch "BB" Fed. Well No. 10	660' FNL-1980'FWL (C)	30-17S-30E

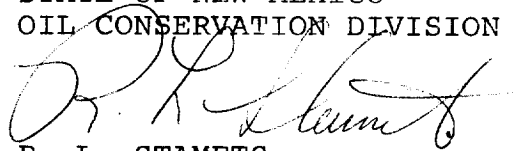
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(8) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

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OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read 'R. L. Stamets', is written over the typed name.

R. L. STAMETS,
Director

S E A L

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<u>WELL NAME AND NO.</u>	<u>FOOTAGE LOCATION (UNIT)</u>	<u>SECTION TOWNSHIP, RANGE</u>
Burch "BB" Fed. Well No. 6	660' FS & WL (M)	19-17S-30E
Burch "BB" Fed. Well No. 10	660' FNL-1980' FWL (C)	30-17S-30E
Burch "BB" Federal Well No. 19	660'FN & FEL (A)	23-17S-29E
Burch "C" Federal Well No. 17	660' FNL-1980'FWL (C)	23-17S-29E
Keely "A" Federal Well No. 5	2310'FSL-330'FEL (I)	24-17S-29E
Keely "A" Federal Well No. 7	1980'FS & WL (K)	24-17S-29E
Keely "A" Federal Well No. 9	1980'FNL -660'FWL (E)	24-17S-29E
Keely "A" Federal Well No. 15	1650'FNL -2310' FEL (G)	24-17S-29E
Keely "B" Federal Well No. 6	660'FNL - 1980' FWL (C)	25-17S-29E
Keely "B" Federal Well No. 7	1980' FN & FEL (G)	26-17S-29E
Keely "B" Federal Well No. 10	1980' FSL - 660'FEL (I)	26-17S-29E
Keely "B" Federal Well No. 11	660' FSL-1980' FEL (O)	26-17S-29E
Keely "B" Federal Well No. 24	660' FSL - 560' FWL (M)	24-17S-29E
Keely "C" Federal Well No. 5	660' FSL - 1980' FEL (O)	24-17S-29E

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Keely "C" Federal Well No. 8	660' FN & FEL	(A)	25-17S-29E
Keely "C" Federal Well No. 10	1980' FNL - 660'FWL	(E)	25-17S-29E
Keely "C" Federal Well No. 12	1980'FN & FEL	(G)	25-17S-29E
Keely "C" Federal Well No. 16	1980'FS & FWL	(K)	26-17S-29E
Keely "C" Federal Well No. 18	1980'FS & FWL	(K)	25-17S-29E
Keely "C" Federal Well No. 20	1980' FSL - 660' FEL	(I)	25-17S-29E
Keely "C" Federal Well No. 21	660' FS & FWL	(M)	26-17S-29E
Keely "C" Federal Well No. 23	660' FS & FWL	(M)	25-17S-29E
Keely "C" Federal Well No. 25	660' FSL - 1980' FEL	(O)	25-17S-29E