# 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. 5762 Order No. R-5295

APPLICATION OF ATLANTIC RICHFIELD COMPANY FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

# ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 15, 1976, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this  $12 \, \text{th}$  day of October, 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, Atlantic Richfield Company, seeks authority to institute a waterflood project on its State Vacuum Unit, Vacuum Pool, by the injection of water into the Grayburg-San Andres formation through 11 injection wells located in Unit M of Section 29, Units A and I of Section 31 and Units C, E, G, I, K, M, N, and O of Section 32, all in Township 17 South, Range 34 East, NMPM, Lea 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 Cole Darden Oil Company Hale State Well No. 1 in Unit A, Section 31, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, was not plugged and abandoned in a manner such as to assure that water injected through said State Vacuum Unit injection wells will not migrate from the Grayburg-San Andres formation to other formations or the surface.

-2-Case No. 5762 Order No. R-5295

- (6) That injection pressure around said Cole Darden Oil Company Hale State Well No. 1 should be limited to prevent such migration.
- (7) 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.
- (8) 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, Atlantic Richfield Company, is hereby authorized to institute a waterflood project on its State Vacuum Unit, Vacuum Pool, by the injection of water into the Grayburg-San Andres formation through the following-described wells in Township 17 South, Range 34 East, NMPM, Lea County, New Mexico:

State Vacuum Unit Well No	. Unit	Section	Township	Range
1	М	29	17s	34E
2	A	31	17S	34E
4	С	32	17S	34E
7	E	32	17S	34E
9	G	32	17S	34E
11	I	31	17S	34E
13	K	32	17S	34E
15	I	32	17S	34E
17	M	32	17S	34E
19	0	32	17S	34E
21	N	32	17S	34E

- (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, or in the case of an open-hole completion, to the casing shoe; that the casing-tubing annulus of each injection well shall be tested for leaks, be loaded with an inert fluid and equipped with an approved 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 860 psi.
- (3) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of 860 psi upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.

-3-Case No. 5762 Order No. R-5295

- (4) That there shall be no injection under pressure into the Cole Darden Oil Company Hale State Well No. 1 in Unit A of Section 31, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico, or into any well on said 40-acre tract or any 40-acre tract directly or diagonally offsetting said well, until said well has been reentered and replugged in accordance with a Commission approved plugging program or said well has been equipped in such a manner as to monitor for leaks below the salt section.
- (5) That the operator shall immediately notify the supervisor of the Commission's Hobbs 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, 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.
- (6) That the subject waterflood project is hereby designated the ARCO State Vacuum Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.
- (7) 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.
- (8) 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 herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL\_R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

wed

S E A L

jr/