Entered October 28, 1982

# 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. 7599 Order No. R-7115

APPLICATION OF BARBER OIL INC. FOR AN EXCEPTION TO RULE 705-A, EDDY COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 21, 1982, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this <u>28th</u> day of October, 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, Barber Oil Inc., is the operator of a waterflood project in the Russell Pool, Eddy County, New Mexico, which flood was originally authorized by Order No. R-263, dated February 10, 1953, and which has been expanded on several occasions pursuant to subsequent orders of the Division.

(3) That by applications dated March 4, 1982, and April 1, 1982, applicant requested administrative approval for an exception to Rule 705-A of the Division Rules and Regulations to permit 37 former injection wells to remain on standby status without having the cement plug or bridge plug installed therein as required by said rule for any temporarily abandoned injection well.

(4) That on April 12, 1982, the Division Director denied the application for administrative approval for such exception, citing as the reason for such denial failure of the applicant to demonstrate good cause to be entitled to such exception.

(5) That subsequent to said denial, applicant filed an application for a hearing in this matter, requesting that as an

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exception to the provisions of Rule 705-A of the Division Rules and Regulations, 37 temporarily abandoned water injection wells in its Russell Pool Waterflood Project be permitted to remain inactive for a period of up to three years without the required cement or bridge plug being installed therein to isolate the injection zone.

(6) That according to the evidence presented at the hearing, of the original 5.3 million barrels of oil in place in the Russell Pool, applicant produced 800,000 barrels on primary recovery and has produced 1.5 million barrels on secondary recovery, leaving approximately 3 million barrels still in the reservoir.

(7) That the applicant has under study a plan for the installation of a tertiary recovery system in the Russell Pool, by means of which perhaps another 1.5 to 1.6 million barrels of oil could be recovered.

(8) That said tertiary recovery system would begin as a pilot project, utilizing eight of the 37 wells which are the subject of this case, and if successful, would be expanded to include some or all of the remaining 29 wells.

(9) That the applicant should be permitted to retain said wells for use in the tertiary recovery system, provided however, that there should be a time limit on such retention without cement or bridge plugs and provided further, that the integrity of the existing casing in the wells should be established by adequate testing.

(10) That three years should be adequate time in which to determine the success of the pilot tertiary recovery system and the feasibility of expansion thereof to include the entire pool.

(11) That the integrity of the casing in each of the wells should be established by successful completion of such testing procedure as may be required by the Supervisor of the Division's Artesia District Office.

(12) That subject to the provisions of Findings Nos. (10) and (11) above, approval of the application will not cause waste nor impair correlative rights and should be granted.

#### IT IS THEREFORE ORDERED:

(1) That the applicant, Barber Oil Inc., is hereby authorized to retain on a temporarily abandoned status, without the installation of a cement plug or bridge plug to isolate the injection zone, the following described wells, all in Township -3-Case No. 7599 Order No. R-7115

20 South, Range 28 East, NMPM Russell Pool, Eddy County, New Mexico.

Lease	Well No.	Location	Section
Crosby Fed	1	330' FSL & 2310' FEL	12
11 11	2	330' FSL & 1650' FEL	12
11 11	4	663' FSL & 2000' FEL	12
Turner Fed	2	1980' FSL & 1980' FWL	13
н н	3	1980' FSL & 1970' FEL	13
11 11	6	660' FNL & 1980' FWL	13
11 11	12	2322' FSL & 2339' FWL	13
tr ti	13	332' FNL & 2340' FWL	13
11 11	15	331' FSL & 1669' FWL	13
FT 11	18	1658' FNL & 2339' FWL	13
fi 11	21	959' FSL & 2339' FWL	13
ti II	22	2322' FSL & 1669' FEL	13
Wills Fed	2	660' FSL & 660' FWL	13
17 TT	5	990' FNL & 330' FWL	13
II 11	6	996' FSL & 1005' FWL	13
II 11	8	996' FNL & 1005' FEL	13
17 IT	10x	2322' FSL & 1005' FWL	13
11 11	14	330' FSL & 330' FEL	13
tt 11	15	996' FSL & 330' FEL	13
11 11	17	1656' FSL & 330' FWL	13
17 TL	18	338' FSL & 352' FWL	13
11 11	19	2322' FNL & 2333' FEL	13
11 11	21	1656' FNL & 1665' FEL	13
11 11	23	330' FNL & 1665' FEL	13
11 U	25	660' FNL & 2000' FEL	13
11 11	26	1305' FNL & 1980' FEL	13
17 11	27	1325' FSL & 660' FWL	13
H II	30	2310' FNL & 990' FEL	13
11 11	33	1330' FSL & 1980' FWL	13
11 11	34	2630' FNL & 1980' FWL	13
17 17	35	1980' FNL & 2630' FEL	13
11 11	36	660' FNL & 1310' FEL	13
11 11	37	660' FNL & 2630' FEL	13
11 11	39	2630' FNL & 1980' FEL	13
11 11	41	1310' FNL & 1310' FEL	13
11 11	42	1330' FSL & 1330' FWL	13
87 18	45	1328' FNL & 2635' FEL	13

PROVIDED HOWEVER, that within 90 days after entry of this Order, applicant shall take such tests on each of the above-described wells as may be required by the Supervisor of the Division's Artesia District Office to ensure the integrity of the casing in said wells, and provided further, that if any such well tests in such a manner as to indicate poor condition

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of the casing, remedial steps shall be taken immediately to remedy this condition.

PROVIDED FURTHER, that this authority for the applicant to maintain the aforesaid wells in a shut-in condition without having cement plugs or bridge plugs installed therein shall expire three years after entry of this order.

(2) 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 N JOE D. RAMEY, Director

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