BEFORE THE OIL CONSERVATION COMMISSION DOWN LOW

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF BARNEY COCKBURN FOR PERMISSION TO INJECT WATER INTO THE RED SAND (QUEEN) HORIZON OF THE CORBIN POOL RESERVOIR THROUGH WYATT-PHILLIPS WELL NUMBER 5, SECTION 33, WYATT-PHILLIPS WELLS NUMBERS 6 AND 8, SECTION 34, ALL IN TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND FOR PERMISSION TO CONTINUE TO PRODUCE OIL FROM THE GRAYBURG-SAN ANDRES FORMA-TION OF THE MALJAMAR POOL RESERVOIR THROUGH THE SAID WYATT-PHILLIPS WELL NUMBER 8.

on b/4/14
No. 109 J

APPLICATION

BARNEY COCKBURN, Post Office Box 105, Artesia, New Mexico, applicant herein, respectfully shows to the Oil Conservation Commission:

1. That applicant is the operator, and together with cale W. Carson, J. B. Stephenson and Don E. Woodward are the owners and holders of Federal Oil and Gas Lease Las Cruces Serial No. 060967, insofar as said lease covers the following land in Lea County, New Mexico, to-wit:

NE/4 NW/4, S/2 NW/4 and SW/4 NE/4 Section 33, NW/4 Section 34, Township 17 South, Range 33 East, N.M.P.M., Lea County, New Mexico, and containing 320 acres, more or less, to a depth of 5500 feet beneath the surface,

which lease is designated as the Wyatt-Phillips Lease.

That a total of twelve wells, two of which are abandoned or were dry holes, have been drilled upon the Wyatt-Phillips Lease. That five of said wells are now producing 116 barrels of oil per day from the Grayburg-San Andres Horizon of the Maljamar Pool Reservoir encountered from a depth ranging from approximately 4285 feet to 4438 feet. That five of said wells are now producing 76 barrels of oil per day from the #17 Red Sand (Queen) Formation of the Corbin Pool Reservoir encountered from a depth ranging from approximately 3750 feet to 3850 feet.

3. That applicant is the operator, and together with Cale W. Carson, J. B. Stephenson and Don E. Woodward are the owners and holders of Federal Oil and Gas Lease New Mexico Serial No. 04242, insofar as said lease covers the following land in Lea County, New Mexico, to-wit:

N/2 S/2 Section 33, N/2 S/2 Section 34, Township 17 South, Range 33 East, N.M.P.M., Lea County, New Mexico, and containing 320 acres, more or less, which lease is designated as the Federal Lease.

- 4. That a total of eight wells have been drilled upon the Federal Lease. That one of said wells is now producing 30 barrels of oil per day from the Grayburg-San Andres Horizon of the Maljamar Pool Reservoir encountered from a depth ranging from approximately 4283 feet to 4300 feet. That seven of said wells are now producing 118 barrels of oil per day from the Bod Sand (Queen) Formation of the Corbin Pool Reservoir encountered from a depth ranging from approximately 3800 feet to 3900 feet.
 - 5. That on the plat attached hereto, marked Exhibit "A" for identification and by reference made a part hereof, is shown the Wyatt-Phillips Lease and the Federal Lease, together with all wells drilled thereon, and each offset operator.

 That Wyatt-Phillips Wells Numbers 5, 6 and 8 as shown on said Exhibit "A" attached hereto are the wells it is proposed to inject water into the Red-Sand (Queen) Horizon of the Corbin Pool Reservoir. That it is applicant's belief that it would be in the interest of conservation, prevent waste and enable applicant to obtain a greater ultimate recovery of oil and hydrocarbons if water was injected into the Red Sand through Wyatt-Phillips Wells Numbers 5, 6 and 8.
 - 6. That attached hereto are copies of logs of WyattPhillips Wells Numbers 5, 6 and 8 showing the formations encountered from the surface to the total depth of each well, the
 description and size of casing run and set in each well and

the quantity of cement with which each string of casing is cemented.

7. That two water wells as shown on said Exhibit "A" attached hereto, will be used as the source of water for the water injection program of applicant. Applicant proposes at the beginning of this water injection program to inject each day the following volumes of water into the water injection wells as follows, respectively:

INJECTION WELL NUMBER	VOLUME OF WATER PER DAY
Wyatt-Phillips No. 5 Wyatt-Phillips No. 6 Wyatt-Phillips No. 8	5 barrels none 5 barrels.

As the results of water injections become known and are studied the above water volumes in Wyatt-Phillips Numbers 5 and 8 will be gradually increased so that at all times the volume of water injected into said wells will be consistent with the withdrawals from offset producing oil wells. At such time as Wyatt-Phillips Well Number 6 has quit producing oil and turned to water as a result of this water injection program, applicant will commence injecting water through Wyatt-Phillips Well Number 6 in such volumes that the total volume of water injected into all of said water injection wells will be consistent with the withdrawals from offset producing oil wells.

- 8. That Wyatt-Phillips Well Number 8 is presently producing oil from the Grayburg-San Andres Horizon of the Maljamar Pool Reservoir from a depth of 4404 feet to 4425 feet. That applicant desires to continue to produce oil from the Graybrug-San Andres Horizon through said Wyatt-Phillips Well No. 8 and to recomplete said well for the purpose of injecting water into the Red Sand (Queen) Horizon.
- 9. That in producing Wyatt-Phillips Well Number 8 from the Grayburg-San Andres Horizon and in recompleting said well for the purpose of injecting water into the Red Sand Horizon,

applicant proposes to perforate the Red Sand Horizon, run 2 inch tubing to a depth of approximately 4200 feet, set a Baker Model "D" Retainer Production Packer at approximately 3800 feet, and then produce the Grayburg-San Andres Horizon through the 2 inch tubing and inject water through the annular space between the casing and tubing into the Red Sand (Queen) Horizon.

10. Applicant does not now ask that the current oil allowable produced from the Red Sand (Queen) Horizon of the Corbin Pool Reservoir be increased by reason of the proposed water injection program.

WHEREFORE, applicant prays that the Commission set a date for hearing this Application, either before the Commission or before an examiner; that upon presentation hereof applicant be granted permission to inject water into the Red Sand (Queen) Horizon of the Corbin Pool Reservoir through Wyatt-Phillips Wells Numbers 5, 6 and 8, as hereinabove described, and for permission to continue to produce oil from the Grayburg-San Andres Formation of the Maljamar Pool Reservoir through Wyatt-Phillips Well Number 8.

A. J. Losee Artesia, New Mexico Attorney for Applicant

STATE OF NEW MEXICO) (ss. COUNTY OF EDDY)

BARNEY COCKBURN, being first duly sworn upon his oath, states:

That he is the applicant named in the within and foregoing Application; that he has read the same and understands the contents thereof; and that the matters therein stated are true and correct according to his best information and belief.

Barney Cockburn

SUBSCRIBED AND SWORN to before me this 4th day of June, 1956.

My Commission Expires:
October 1, 1956

Notary Public