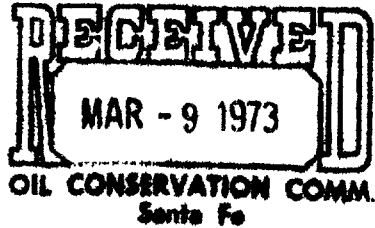


BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO



IN THE MATTER OF THE APPLICATION OF  
SHENANDOAH OIL CORPORATION TO INSTITUTE  
A WATERFLOOD PROJECT BY THE INJECTION OF  
WATER INTO THE GRAYBURG AND SAN ANDRES  
FORMATIONS THROUGH SIXTEEN INJECTION WELLS  
TO BE LOCATED IN SECTIONS 27, 34 AND 35,  
TOWNSHIP 17 SOUTH, RANGE 29 EAST, GRAYBURG  
JACKSON (Q.G.S.A.) FIELD, EDDY COUNTY, NEW  
MEXICO.

*Case 4926*

APPLICATION FOR APPROVAL OF  
ROBINSON JACKSON WATERFLOOD PROJECT

Comes now the Applicant, Shenandoah Oil Corporation, and  
hereby makes application for approval of a waterflood project pur-  
suant to Rule 701 of the Rules and Regulations of the Commission  
and in support thereof states:

1. Applicant desires to initiate a waterflood project  
to inject fresh water into the Grayburg and San Andres formations  
in sixteen existing wells on the following described tracts:

<u>WELL NUMBER</u>	<u>LOCATION</u>
F. M. Robinson "A" 4	Unit G, 1,980' FNL & 1,980' FEL Sec. 34, T-17-S, R-29-E
F. M. Robinson "A" 7	Unit I, 1,980' FSL & 660' FEL Sec. 27, T-17-S, R-29-E
F. M. Robinson "A" 9	Unit O, 660' FSL & 1,980' FEL Sec. 27, T-17-S, R-29-E
F. M. Robinson "A" 11	Unit E, 1,980' FNL & 660' FWL Sec. 35, T-17-S, R-29-E
F. M. Robinson "A" 12	Unit A, 660' FNL & 654' FEL Sec. 34, T-17-S, R-29-E
F. M. Robinson "B" 1	Unit A, 660' FNL & 660' FEL Sec. 27, T-17-S, R-29-E

DOCKET MAILED

Date 3/15/73

<u>WELL NUMBER</u>	<u>LOCATION</u>
F. M. Robinson "B" 4	Unit A, 660' FEL & 660' FNL Sec. 35, T-17-S, R-29-E
F. M. Robinson "B" 6	Unit G, 1,980' FNL & 1,980' FEL Sec. 35, T-17-S, R-29-E
F. M. Robinson "B" 8	Unit K, 1,980' FWL & 1,980' FSL Sec. 27, T-17-S, R-29-E
F. M. Robinson "B" 11	Unit C, 660' FNL & 1,980' FWL Sec. 35, T-17-S, R-29-E
F. M. Robinson "B" 15	Unit G, 1,980' FNL & 1,980' FEL Sec. 27, T-17-S, R-29-E
F. M. Robinson "B" 16	Unit I, 1,980' FSL & 660' FEL Sec. 35, T-17-S, R-29-E
F. M. Robinson "B" 17	Unit K, 1,980' FSL & 1,980' FWL Sec. 35, T-17-S, R-29-E
F. M. Robinson "B" 18	Unit O, 660' FSL & 1,980' FEL Sec. 35, T-17-S, R-29-E (Outside Unit Area)
F. M. Robinson "B" 19	Unit I, 1,980' FSL & 660' FEL Sec. 34, T-17-S, R-29-E
F. M. Robinson "B" 20	Unit C, 660' FNL & 1,980' FWL Sec. 34, T-17-S, R-29-E (Outside Unit Area)

2. That the above wells and all other wells in the area have reached an advanced state of depletion and are stripper wells.

3. That Applicant feels that the waterflooding of the Grayburg and San Andres formations is feasible and that flooding will result in the increased ultimate recovery of oil and prevent waste.

4. That other operators are successfully waterflooding on all sides of this project. That General American Oil Company is waterflooding the Grayburg formation to the East in Section 26, Newmont Oil Company is successfully waterflooding the Grayburg

formation to the South in Sections 2 and 3, Township 18 South, Range 29 East, that Tenneco Oil Company is waterflooding to the West in Sections 27 and 28, and that Sun Oil Company is waterflooding the San Andres formation to the North in Section 22.

5. That when need arises, upon administrative approval, Applicant should be permitted to convert to water injection wells additional wells within its lease boundaries or to drill additional injection wells in the area described in Exhibit "A" attached hereto.

6. Applicant proposes to inject fresh water and produced water when available in the Metex and Loco Hills zones of the Grayburg formation at the approximate depth of 2,359 feet and into the Jackson zone of the San Andres formation at the approximate depth of 2,774 feet, and into additional zones within the Grayburg and San Andres formations that may warrant water injection after the wells have been worked over. Applicant proposes to inject 300 barrels of water per day into each of the two zones in the Grayburg formation and 300 barrels of water per day into the San Andres formation, or a total of 900 barrels per day. The injection areas of the various wells are set forth on Exhibit "C". Injection water will be purchased from a commercial water company and the injection plant will be capable of handling produced water for reinjection.

7. That in support of this application and in accordance with the provisions of Rule 701-B, Applicant submits herewith the following exhibits:

Exhibit A - Plat showing the location of Applicant's project and lands embraced therein.

Exhibit B - Plat showing location of Applicant's acreage and location of all other wells within the radius of two miles from the proposed injection wells.

Exhibit C - Nos. 1-16 Diagrametic Sketches of the proposed injection wells showing estimated tops of the cement, perforations and depths.

Exhibit D - Diagrametic Sketch showing the typical down hole equipment to be installed in each injection well.

At the hearing the Applicant will furnish available logs of the proposed injection wells.

WHEREFORE, Applicant requests the Commission to set this matter sown for hearing before an examiner at an early date, publish notice as required by law and, after hearing, issue its Order:

1. Authorizing the waterflood project and the injection of water into the Grayburg and San Andres formations in the sixteen injection wells located in Sections 27, 34 and 35, Township 17 South, Range 29 East.

2. Establishing rules for administrative expansion and conversion of additional wells to water injection wells.

Respectfully submitted,

SHENANDOAH OIL CORPORATION

By 

James T. Jennings, for  
JENNINGS, CHRISTY & COPPLE  
Attorneys for Applicant  
P. O. Box 1180  
Roswell, New Mexico 88201