

SHENANDOAH OIL CORPORATION

1500 COMMERCE BUILDING  
FORT WORTH, TEXAS 76102

B. J. KELLENBERGER  
PRESIDENT

August 17, 1971

TELEPHONE  
817-332-7381

RECEIVED  
AUG 18 1971  
JIL CONSERVATION COMM

Mr. A. L. Porter, Jr.  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re; Shenandoah Oil Corporation's  
Artesia Seven Waterflood Project  
Eddy County, New Mexico

Dear Mr. Porter;

In accordance with Rule 703(a) of the New Mexico Rules and Regulation Book, this is to advise you that water injection into the nine wells as set forth in Case No. 4520, was commenced August 12, 1971. These wells are located in Sections 30 and 31, Township 17 South, Range 29 East and Sections 25 and 36, Township 17 South, Range 28 East, Eddy County, New Mexico as follows:

<u>Lease</u>	<u>Well No.</u>	<u>Location</u>
Atsel Federal	2	Unit I - Section 30
Green Federal	1	Unit D - Section 31
Green Federal	5	Unit E - Section 31
Green Federal	7	Unit B - Section 31
Continental "B" State	3	Unit N - Section 30
Continental "E" State	4	Unit F - Section 30
Five "J"	1	Unit I - Section 25
Five "J"	3	Unit O - Section 25
Five "J"	2	Unit G - Section 36

Attached is a plat showing the location of the above wells within the Project Area.

Very truly yours,

SHENANDOAH OIL CORPORATION



T.P. Bates  
Vice President - Secondary Recovery

TPB:jn  
Attachment

CC: C. W. Downey  
New Mex. Oil Conservation Commission - Artesia  
U. S. Geological Survey - Artesia  
U. S. Geological Survey - Roswell

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

May 24, 1971

**Mr. James T. Jennings  
Jennings, Christy & Copple  
Attorneys at Law  
P. O. Box 1180  
Roswell, New Mexico 88201**

**Dear Sir:**

Reference is made to Commission Order No. R-4134, recently entered in Case No. 4520, approving the Shenandoah Artesia Seven Waterflood Project.

Initial injection is to be through the authorized water injection wells with each well equipped with a string of tubing set in a packer located as near as is practicable to the uppermost injection perforation; separation of the injection fluid into the Metex and the Premier zones shall be accomplished through down-hole flow regulators. The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 924 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less, subject to acreage factor corrections for Units L and M of Section 30 and D and E of Section 31, and also subject to 14 extra barrels for each additional well, if operated, on several tracts.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

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OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Mr. James T. Jennings  
Roswell, New Mexico

-2-

May 24, 1971

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In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, s.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/dr

cc: Oil Conservation Commission  
Hobbs and Artesia  
Mr. D. E. Gray, State Engineer Office



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

GOVERNOR  
BRUCE KING  
CHAIRMAN  
LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER  
STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

April 19, 1971

Mr. James T. Jennings  
Jennings, Christy & Copple  
Attorneys at Law  
Post Office Box 1180  
Roswell, New Mexico 88201

Re: Case No. 4520  
Order No. R-4134  
Applicant:  
Shenandoah Oil Corporation

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC   x    
Artesia OCC   x    
Aztec OCC         
State Engineer   x  

Other \_\_\_\_\_

APR 12 1971

# DEPCO, Inc.

PRODUCTION & EXPLORATION

April 12, 1971

New Mexico Oil and Gas  
Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico 87501

Re: Case No. 4520

Gentlemen:

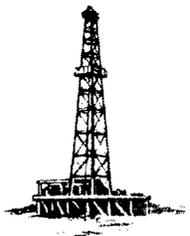
DEPCO, Inc., as operator of certain properties in the area embraced by the above proceedings, will not be represented at the hearing. Negotiations relative to the sale of our interests in the properties involved in this matter to Shenandoah Oil Corporation are in progress. DEPCO, Inc. has no objection to the application by Shenandoah for waterflood project approval.

Yours very truly,

C. D. CRUMP  
Production Manager

CDC/jer

cc: Shenandoah Oil Corporation  
1018 Commerce Building  
Fort Worth, Texas 76100



A diagramed sketch is attached that shows the typical downhole equipment to be installed in an injection well. The example is from another flood that Shenandoah operates and it has proven very successful.

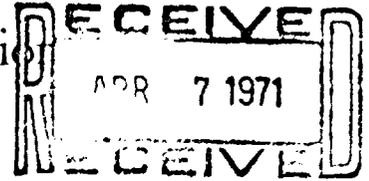
The casing-tubing annulus will be loaded with inert fluid and will have a pressure gauge at the surface to check for indications of any packer leakage.



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210



JENNINGS, CHRISTY & COPPLE

April 6, 1971

Jennings, Christy & Copple  
Post Office Box 1180  
Roswell, New Mexico 88201

Gentlemen:

Your letter of March 18, 1971 requests approval for Shenandoah Oil Corporation to operate a water project of the Premier Zone of the Grayburg formation in T. 17 S., R. 28 and 29 E., N.M.P.M., Eddy County, New Mexico, involving that portion of Federal oil and gas leases described as follows:

Las Cruces 062407

T. 17 S., R. 29 E.

Sec. 30: N $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$

New Mexico 0555569

T. 17 S., R. 29 E.

Sec. 31: NW $\frac{1}{4}$ , NW $\frac{1}{4}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ NE $\frac{1}{4}$

This project includes State lands in sections 25 and 36, T. 17 S., R. 28 E., and sec. 30, T. 17 S., R. 29 E. The flood pattern would be nonsymmetrical and the project operator proposes to convert to water injection the following wells on Federal leases, and to drill as an injection a well in the SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, also on Federal land:

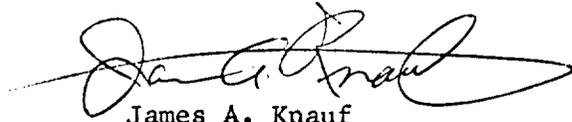
<u>Well Number and Lease</u>	<u>Location</u>
3-Atsel Federal	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30
1-Green Federal	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31
5-Green Federal	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31
7-Green Federal	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31

The plan for operating the Federal leases in the waterflood project as proposed in the application is satisfactory to this office and hereby approved subject to approval by the New Mexico Oil Conservation Commission and the following:

1. This project will be operated in compliance with the New Mexico Oil Conservation Commission regulations governing waterflood operations.

2. Duplicate copies of a monthly progress report (N.M.O.C.C. form C-120 acceptable) are to be submitted to this office showing the volume of water injected and average pressures for the injection wells and production for the producing wells in the project area.
3. This approval does not preclude the necessity for further approval when the project is expanded to include other wells and leases or the necessity to submit the usual notices and reports on wells involved on Federal leases. When this project is expanded to involve other operators and interests, the correlative rights of all concerned should be considered.

Sincerely yours,



James A. Knauf  
District Engineer

cc:  
N.M.O.C.C., Santa Fe  
Roswell  
Accounts

RLBeekman:ih 4/6/71