

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

10 JUN 12 AM 9 19

IN THE MATTER OF THE APPLICATION OF
SHENANDOAH OIL CORPORATION TO CONVERT
AN ADDITIONAL WELL TO WATER INJECTION
WELL IN THE SHENANDOAH SHUGART WATERFLOOD
PROJECT IN THE SHUGART POOL, EDDY COUNTY,
NEW MEXICO.

See 4380
CASE NO. ~~3779~~

APPLICATION FOR ADMINISTRATIVE APPROVAL
OF ADDITIONAL WATER INJECTION WELL

Comes now Applicant, Shenandoah Oil Corporation, and hereby makes application for administrative approval of the conversion of an additional well to water injection in the Shenandoah Shugart Waterflood Project pursuant to Rule 701 E-5 of the Rules and Regulations of the Commission and in support thereof states:

1. That by Order No. R-3431 the Commission authorized the Applicant herein to institute a waterflood project in the Shugart Pool by the injection of water into the Yates, Seven Rivers, Queen and Grayburg formations and the Commission designated the waterflood project as the Shenandoah Shugart Waterflood Project.

2. That by Administrative Order No. WFX 332 dated January 29, 1970, the Applicant, Shenandoah Oil Corporation, was authorized to inject water into the Yates, Seven Rivers, Queen and Grayburg formations in the following described wells:

Shugart A Well No. 9 located in Unit I of Section 29,
Shugart D Well No. 7 located in Unit D of Section 30,
Shugart D Well No. 9 located in Unit M of Section 20,
Shugart A (APCO) Well No. 2 located in Unit B of Section 29,
Shugart A (APCO) Well No. 4 located in Unit F of Section 29,
and Kenwood-Federal (Mayer) Well No. 1 located in Unit N
of Section 19, all in Township 18 South, Range 31 East,
N.M.P.M.

That on March 23, 1970, Applicant commenced water injection in said wells.

3. That Kersey & Company, an offset operator, is operating a waterflood project offsetting Applicant's project located in Section 4, Township 19 South, Range 31 East, N.M.P.M., and that Applicant has entered into a Cooperative Agreement for Waterflooding Shugart Field with Kersey & Company, a xerox copy of which is attached hereto and marked Exhibit "1". A plat reflecting the wells into which water is to be injected pursuant to the terms of said agreement is attached hereto and marked Exhibit "2".

4. That the offset operator, Kersey & Company, has heretofore filed an Application with the Commission to inject water into the Welch "A" No. 2 Well located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 4 and the Welch "A" No. 4 Well located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 4, Township 19 South, Range 31 East, N.M.P.M.

5. That the Applicant desires to convert its Shugart "B" No. 1 Unit ⁹~~2~~ Well located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 33, Township 18 South, Range 31 East, N.M.P.M., to water injection.

6. That the Applicant will inject fresh to brackish and produced water into the Yates and Queen formations; that the injection well will be completed in the same manner as other injection wells on the project in that the Applicant will use plastic coated tubing and a downhole Baker flow regulator control valve and packers.

7. That the conversion of the additional well to water injection is necessary for an efficient injection pattern and will insure the protection of correlative rights and will result in the increased ultimate recovery of oil and prevent waste.

8. In support of this Application and in accordance with the provisions of Rule 701-B, Applicant has heretofore submitted in connection with its original application for waterflood project a plat marked as Exhibit A therein showing the location of Applicant's project relative to the ownership of all other leases within a two mile radius which are producing from one or more of the same geologic formations, and Applicant hereby adopts said exhibit by reference and Applicant hereby submits the following exhibits in addition to those heretofore mentioned:

Exhibit "3": A plat showing the field pattern, the eleven injection wells and the well which Applicant proposes to convert to a water injection well.

Exhibit "4": Diagramatic sketch of proposed injection well showing tops of cement, perforations and depths.

Exhibit "5": Log of proposed injection well.

WHEREFORE, Applicant requests that the Secretary-Director of the Commission approve the expansion of the Shenandoah Shugart Waterflood Project to include the injection well described above, and that Applicant be authorized to inject water into the Yates and Queen formations in the injection well located in Unit I of Section 33, Township 18 South, Range 31 East, N.M.P.M.

Respectfully submitted,

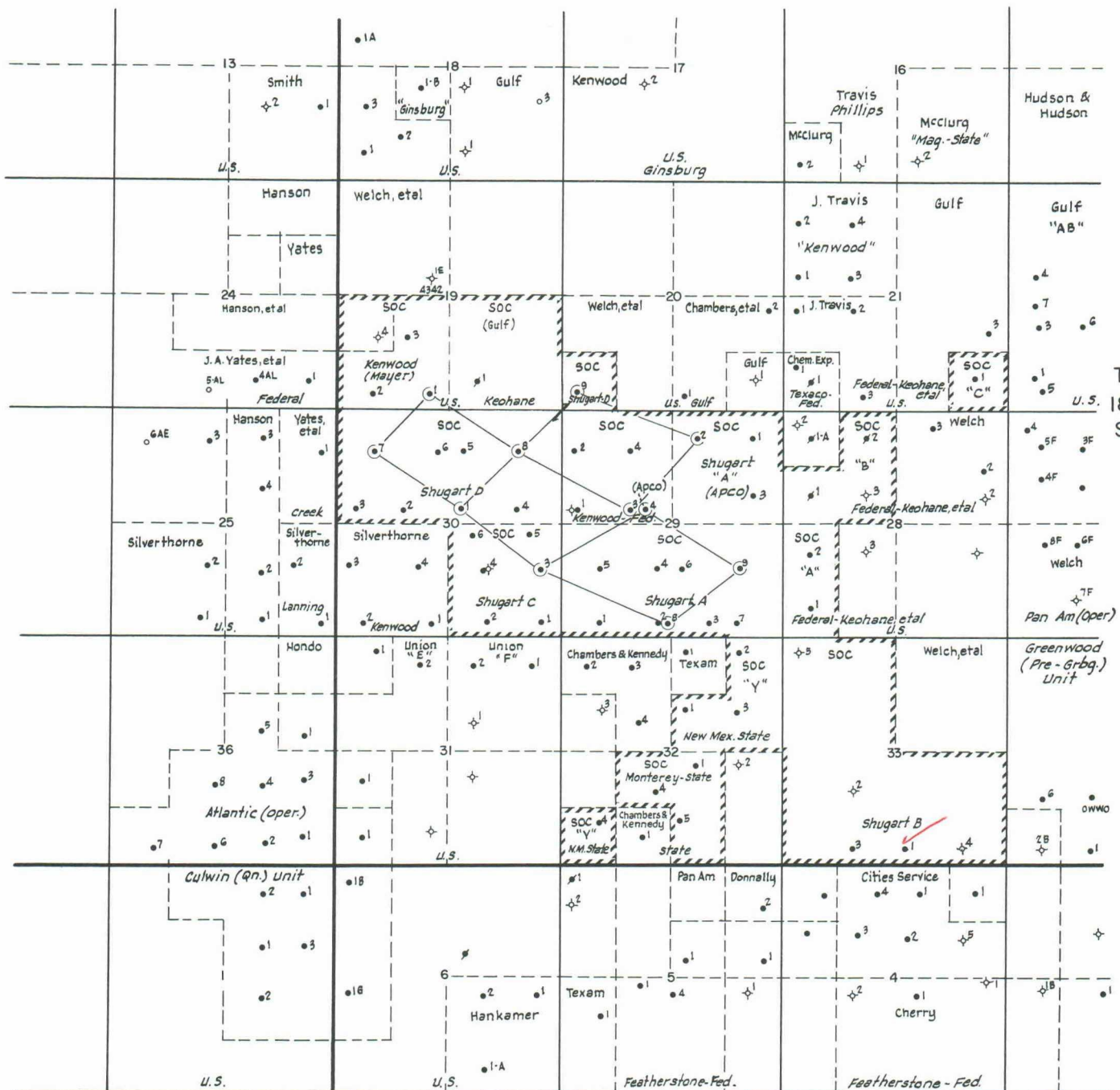
SHENANDOAH OIL CORPORATION

By 

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

R 30 E

R 31 E



-LEGEND-

----- Lease Boundaries

● Injection Well

○—○ Injection Pattern

✓ Proposed Injection Well



SHENANDOAH OIL CORPORATION

FLOOD NO. 4

SHUGART

EDDY COUNTY, NEW MEXICO

 SCALE
 0 1/2 1 MI.

FEB., 1970