



NEIL B. WATSON  
FRED A. WATSON

LAW OFFICES  
**WATSON & WATSON**  
CARPER BUILDING - P. O. DRAWER E  
ARTESIA, NEW MEXICO  
88210

AREA CODE 505  
746-4151 · 746-2201

May 3, 1967.

*Enc 35-92*

The Oil Conservation Commission  
of New Mexico,  
Santa Fe, New Mexico.

Gentlemen:

Re: Application of Anne Burnett Windfohr, d/b/a  
Windfohr Oil Company, for authority to institute  
a waterflood project by injection into the San  
Andres Formation as to wells located in Sections  
11, 12, 13, 14, 23 and 24, Township 17 South,  
Range 30 East, N.M.P.M., Eddy County, New Mexico.

I herewith enclose in triplicate the captioned Application,  
complete with Exhibits attached to each copy and complete  
with certificate showing that copies have been furnished to  
the State Engineer and to the United States Geological Survey.

In talking to Mr. Nutter today, it is my impression that this  
case may be heard at the hearing on June 6, 1967, and I sin-  
cerely hope that it can be placed on that docket. Thanking  
you in advance for your consideration, I remain,

Yours very truly,

*Fred A. Watson*  
Fred A. Watson.

FAW:drm  
Encs.

*Place first on  
docket*

DOCKET MAILED

Date 5-25-67

*R*

RECEIVED  
MAY 22 AM 8 11 '67

May 19, 1967

Mr. Ralph L. Gray  
Consultant  
Box 198  
Artesia, New Mexico

Dear Mr. Gray:

Your letter of May 9, 1967 referring to my comments on the Windfohr Oil Company application seeking Oil Conservation Commission authorization for a waterflood project is gratefully acknowledged.

FEI/ma  
cc-Mr. Neil Watson  
Mr. A. L. Porter, Jr.  
Mr. F. H. Hennighausen

Yours truly,  
  
S. E. Reynolds  
State Engineer

By:  
Frank E. Irby  
Chief  
Water Rights Div.

**RALPH L. GRAY**  
PETROLEUM ENGINEERING - PRODUCTION  
CONSULTANT  
302 CARPER BUILDING  
ARTESIA, NEW MEXICO  
May 9, 1967

67 May 10 PM 1 27

State Engineer Office  
Santa Fe, New Mexico

Case 3592

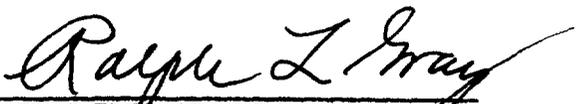
Attention: Mr. Frank E. Irby

Dear Mr. Irby:

This refers to your letter of May 5, 1967, regarding the application of Windfohr Oil Company for authorization to conduct a waterflood project on their proposed Grayburg Jackson San Andres Unit, Eddy County, New Mexico. Your letter made certain comments in regard to information submitted in our application. We would like to explain these questions as follows:

1. In drafting the diagrammatic sketch shown as Exhibit #3, the amount of cement used on the oil strings was omitted through an oversight. In each case, 100 sacks of cement were used in cementing the 7" oil strings.
2. The estimated top of cement is based on 100 sacks of cement.
3. No depths were shown for the packer point inside the 4½" casing. The depth of the packer will not be determined until such time as the packer is actually run and we consider that for the purpose of the diagrammatic sketch, that the packer being shown set in the 4½" liner is adequate. The installation of the 4½" liner will be a normal condition and we would estimate that the top of the liner will be within the range of 50 to 150 feet above the 7" casing point.
4. Mr. Irby states that no indication is given as to how the new wells will be constructed or equipped. It was planned to bring this out in the hearing in our testimony but in order to furnish you information at this time, it is planned to cement new casing to the bottom of the hole and pay zones will be perforated. It is doubtful that we will use a packer in the new wells.

Yours very truly,

  
REGISTERED PETROLEUM ENGINEER.

RLG:lw

cc: Mr. Neil Watson  
Mr. A. L. Porter, Jr.  
Mr. F. H. Hennighausen



**STATE OF NEW MEXICO**  
**STATE ENGINEER OFFICE**  
**SANTA FE**

STATE ENGINEER OFFICE  
MAY 8 AM 8 07

S. E. REYNOLDS  
STATE ENGINEER

May 5, 1967

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
SANTA FE, NEW MEXICO 87501

*Case 3592*

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Windfohr Oil Company which seeks authorization for a waterflood project in Sections 11, 12, 13, 14, 23 and 24, Township 17 South, Range 30 East.

For your convenience, I respectfully offer the following four comments regarding this application:

1. No cement quantities are given for the oil string.
2. In view of #1, there seems to be no basis for estimating the top of the cement surrounding the oil string.
3. No setting depth, with relation to the cement top, is given for packers which are to be installed.
4. No indication is given as to how the newwells will be constructed and equipped.

FBI/ra  
cc-Watson & Watson  
F. H. Hennighausen

Yours truly,

S. E. Reynolds  
State Engineer

By: *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Div.

WINDFOHR OIL COMPANY

DAILY OIL & WATER PRODUCTION FOR FEBRUARY 1967

	<u>OIL</u>	<u>WATER</u>
Gissler "A" #2	2	0
#3	1	0
#4	3	0
#5	2	0
#6	2	0
#7	2	0
#8	2	0
#9	2	0
#10	1	0
#11	1	0
Lease Total	<u>18</u>	<u>0</u>
Gissler "B" #1	2	0
#2	1	0
Lease Total	<u>3</u>	<u>0</u>
Jackson "A" #2	3	0
#3	9	0
#4	1	0
#5	3	0
#6	3	0
#7	8	0
#8	3	0
#9	2	0
#10	2	3
#11	1	0
#12	2	0
#13	2	0
#14	6	0
#15	8	0
Lease Total	<u>53</u>	<u>3</u>
Jackson "B" #1	5	0
#2	10	3
#3	5	0
Lease Total	<u>20</u>	<u>3</u>
Stevens "A" #1	3	0
#2	5	2
#3	2	0
#4	5	0
#5	3	0
Lease Total	<u>18</u>	<u>2</u>
Stevens "B" #1	1	0
#2	1	0
Lease Total	<u>2</u>	<u>0</u>

Average Oil Production per day per well - - - - - 3 Bbls.

**BEFORE EXAMINER NUTTER**  
**OIL CONSERVATION COMMISSION**  
*Windfohr* EXHIBIT NO. 7  
CASE NO. 3592

WINDFOHR OIL COMPANY

<u>LEASE &amp; WELL NOS.</u>	<u>NO. OF WELLS</u>	<u>ULTIMATE PRIMARY OIL</u>
Gissler "A" #2 - 11	10	1,262,433 bbls.
Gissler "B" #1 & #2	2	201,382
Jackson "A" #3 & #7	2	621,194
Jackson "A" #2 - 15	12	2,169,778
Jackson "B" #1, 2, 3, & 21	4	509,504
Stevens "A" #1 & #5	2	973,861
Stevens "A" #2 & #4	2	472,872
Stevens "A" #3	1	187,844
Stevens "B" #1 & #2	2	<u>107,442</u>
Total Ultimate Primary - - - - -		6,506,310 bbls.

**BEFORE EXAMINER NUTTER**  
OIL CONSERVATION COMMISSION  
*Windfohr* EXHIBIT NO. 8  
CASE NO. 3592



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON, D.C. 20242

JUN 26 1967

Windfohr Oil Company  
1202 First National Bank Bldg.  
Fort Worth, Texas 76102

Gentlemen:

On June 22, 1967, Robert H. Lyddan, Acting Director of the Geological Survey, approved the Grayburg-Jackson (San Andres) unit agreement, Eddy County, New Mexico, filed by your company as unit operator. This agreement has been designated No. 14-08-0001-8867, and is effective as of July 1, 1967.

Enclosed is one copy of the approved unit agreement for your records. We request that you furnish all interested principals with whatever evidence of this approval is deemed appropriate.

Sincerely yours,

  
For the Director

Enclosure

NOV 1967

'67 JUL 5 AM 8 13



CERTIFICATION--DETERMINATION

14-08-0001 8867

Pursuant to the authority vested in the Secretary of Interior, under the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. secs. 181, et seq., and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, I do hereby:

A. Approve the attached agreement for the development and operation of the Grayburg-Jackson (San Andres) Unit Area, Eddy County, New Mexico.

B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Dated JUN 22 1967.

ACTING

Director, United States Geological Survey

MAIL ROOM

'67 JUL 5 AM 8 13

WINDFOHR OIL COMPANY

1202 FIRST NATIONAL BANK BUILDING  
FORT WORTH, TEXAS 76102

June 30, 1967

EDISON 2-5108

*SWA*

*File  
6/30/67*

1967 JUL 5 AM 9 10

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr., Secretary

Dear Sir:

On June 6, 1967 Windfohr Oil Company filed an application with the New Mexico Oil Conservation Commission for injecting water into wells in our Grayburg Jackson (San-Andres) Unit located in the Grayburg-Jackson Pool. This application was approved by your Order No. R-3257. During the course of the hearing, it was requested that Windfohr Oil Company furnish the Conservation Commission with copies of the USGS approval letters when they were received. In compliance with this request, attached is a copy of the Certification--Determination and the transmittal letter received today from the United States Department of the Interior, Geological Survey. As will be seen, this Unit is effective July 1, 1967.

Yours very truly,

WINDFOHR OIL COMPANY

*John Rush Vann*  
John Rush Vann

JRV/mf  
Attachments

cc: Mr. Fred Watson

**RALPH L. GRAY**  
PETROLEUM ENGINEERING - PRODUCTION  
CONSULTANT  
P. O. BOX 198  
ARTESIA, NEW MEXICO

June 28, 1967

1967 JUN 29 AM 10 12

New Mexico Oil Conservation Commission  
P. O. Box #2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr., Secretary

Dear Sir:

A short time ago Windfohr Oil Company filed an application with the New Mexico Oil Conservation Commission for injecting water into wells in their Grayburg-Jackson-San Andres Unit located in the Grayburg-Jackson Pool. This water injection project was approved by your Order No. R-3257. As stated in our testimony, the program for converting seven producing wells to water injection wells included cleaning out, running Gamma Ray-Sonic surveys and injectivity profile surveys, and then cementing 4 $\frac{1}{2}$ " liners through the open hole, perforating pay zones and setting packers in the upper portion of the 4 $\frac{1}{2}$ " liners.

Because of recent experience in conducting this conversion program, we wish permission to deviate slightly from the program as outlined at the hearing. As explained in our telephone conversation to you on June 27, 1967, we have found that these wells take a large amount of water in trying to conduct surveys and we have found it practically impossible to conduct a satisfactory injectivity profile survey because of the low pressures involved. Also because of the high degree of permeability and lack of formation pressure, we anticipate that considerable difficulty will probably be experienced in cementing liners through the open hole because of the loss of cement into the permeable intervals.

We would like to amend our conversion program to provide that after running Gamma Ray-Sonic and caliper surveys, we will load the casing with water and continue filling the hole with water until the water level in the casing stands at approximately the surface. Essentially what we will do is to pressure up the formation in the vicinity of the well bore so that satisfactory profile surveys can be conducted, and we believe this will also aid us in getting a good cement job when cementing the liners.

The United States Geological Survey has approved this revised program and we are attaching copies of Sundry Notices which are being filed with the U.S.G.S.

Your approval of this revision in our conversion program will be appreciated.

Yours very truly,

  
REGISTERED PETROLEUM ENGINEER.

RLG:lw

Encls.

cc: New Mexico Oil Conservation Commission, Artesia  
Mr. Rush Vann, Windfohr Oil Company  
Mr. E. R. McPhaul

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.

IG-030570 (a)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Stevens "A"

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Grayburg-Jackson, GR, SA

11. SEC., T., R., M., OR BLK. AND  
SUBVEY OR AREA

Sec. 13-17S-30E

12. COUNTY OR PARISH 13. STATE

Eddy

New Mexico

1.

OIL WELL  GAS WELL  OTHER  **Convert to Water Injection**

2. NAME OF OPERATOR

WINDFOHR OIL COMPANY

3. ADDRESS OF OPERATOR

1202 First National Bank Building, Fort Worth, Texas 76102

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface 660' from West and 1980' from South lines of  
Sec. 13-17S-30E.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO :

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) **Convert to Water Injection**

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF :

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

It is proposed to convert this well to a water injection well by the following work:

1. Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.
2. Pull rods and tubing. Run caliper survey.
- 2-A. Set umbrella bridge at about 3560'. Dump 10' of gravel and approximately 6' of cement on top of bridge.
3. Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.
4. Run injectivity profile survey to locate zones taking water.
5. Cement 4½" O.D. J-55, 9.5# liner from bottom of hole to approximately 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off.
6. Perforate 4½" liner in San Andres, using sand jet.
7. Acidize perforations with small quantities.
8. Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ralph L Gray*

TITLE

Consulting Engineer.

DATE

June 27, 1967

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

MAIL OFFICE

'67 JUN 29 AM 8 12

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 17:** Proposals to abandon a well and subsequent reports of abandonment should include special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

**OIL CONSERVATION COMMISSION**

P. O. BOX 2088

SANTA FE, NEW MEXICO

August 21, 1967

C  
Mr. Ralph L. Gray  
Post Office Box 198  
Artesia, New Mexico

Dear Mr. Gray:

O  
P  
Reference is made to your letter of June 28, 1967, concerning the Windfohr Oil Company Grayburg-Jackson Waterflood Project which was approved by Order No. R-3257, and also to subsequent telephone conversations between you and Mr. Dan Mutter of this office, particularly in reference to your request to defer running the liners in the injection wells for a period of time during which you would inject down the casing in order to achieve partial reservoir fill-up. This would permit obtaining injectivity profiles and should also cut down on cement loss while cementing the liners.

Y  
This letter, which is an amendment to our letter of June 13, 1967, regarding this project, provides written confirmation of Windfohr's authority to proceed in the manner outlined above for a maximum of six months.

Please advise this office in the event fill-up has not been obtained or if the liners have not been run by January 1, 1968.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSN/ir

cc: Oil Conservation Commission - Artesia, New Mexico  
U. S. Geological Survey - Artesia, New Mexico  
Mr. Frank Irby, State Engineer Office - Santa Fe, New Mexico  
Case File 3592 ✓

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

June 13, 1967

C

Mr. Fred Watson  
Watson & Watson  
Attorneys at Law  
Carper Building  
Artesia, New Mexico

O

Dear Sir:

P

Reference is made to Commission Order No. R-3257, recently entered in Case No. 3592, approving the Windfohr Grayburg-Jackson Waterflood Project.

Y

Initial injection shall be through the eight authorized injection wells, all but one of which are to be converted producers. Injection into these seven wells shall be through plastic coated tubing set in packers, which shall be set in the upper portion of the 4 $\frac{1}{4}$ -inch liner to be inserted in each well. The casing-annulus shall be loaded with an inert fluid. Injection into the eighth well, which is to be drilled, shall be down tubing.

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 1134 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels or less.

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.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

-2-

Mr. Fred Watson  
Watson & Watson  
Attorneys at Law  
Artesia, New Mexico

C  
O  
P  
Y  
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, i.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/DSN/ix

cc: Mr. Frank Irby  
State Engineer Office  
Santa Fe, New Mexico

Oil Conservation Commission  
Drawer DD  
Artesia, New Mexico

U. S. Geological Survey  
Artesia, New Mexico

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**LC-030570 (a)**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Stevens "A"**

9. WELL NO.

**5**

10. FIELD AND POOL, OR WILDCAT

**Grayburg-Jackson, GB, SA**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**Sec. 13-17S-30E**

12. COUNTY OR PARISH

**Eddy**

13. STATE

**New Mexico**

1. OIL WELL  GAS WELL  OTHER  **Convert to Water Injection**

2. NAME OF OPERATOR

**WINDFOR OIL COMPANY**

3. ADDRESS OF OPERATOR

**1202 First National Bank Bldg., Fort Worth, Texas 76102**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)

At surface

**660' from South and 1980' from West lines of  
Sec. 13-17S-30E.**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

**Convert to Water injection**

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**It is proposed to convert this well to a water injection well by the following work:**

- 1. Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.**
- 2. Pull rods and tubing, run Gamma Ray-Sonic and caliper logs.**
- 3. Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.**
- 4. Run injectivity profile survey to locate zones taking water.**
- 5. Cement 4½" O.D. J-55, 9.5# liner from bottom of hole to approximately 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off.**
- 6. Perforate 4½" liner in San Andres, using sand jet.**
- 7. Acidize perforations with small quantities.**
- 8. Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.**

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ralph L. Gray*

TITLE

**Consulting Engineer.**

DATE

**June 27, 1967**

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

DATE

**267 JUN 29 AM 8 12**

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 17:** Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**LC-029338 (a)**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Gissler "A"**

9. WELL NO.

**9**

10. FIELD AND POOL, OR WILDCAT

**Grayburg-Jackson, GB, SA**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**Sec. 14-17S-30E**

12. COUNTY OR PARISH

**Max Eddy**

**New Mexico**

1.

OIL WELL  GAS WELL  OTHER **Convert to Water Injection**

2. NAME OF OPERATOR

**WINDFOHR OIL COMPANY**

3. ADDRESS OF OPERATOR

**1202 First National Bank Bldg., Fort Worth, Texas 76102**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*

See also space 17 below.)

At surface **660' from East and 1980' from North lines of Section 14, 17S-30E.**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16.

**Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) **Convert to Water Injection**

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**It is proposed to convert this well to a water injection well by the following work:**

- 1. Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.**
- 2. Pull rods and tubing, run Gamma Ray-Sonic and caliper logs.**
- 3. Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.**
- 4. Run injectivity profile survey to locate zones taking water.**
- 5. Cement 4 1/2" O.D. J-55, 9.5# liner from a selected point in the San Andres to a point approximately 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off.**
- 6. Perforate 4 1/2" liner in San Andres, using sand jet.**
- 7. Acidize perforations with small quantities.**
- 8. Run tubing internally coated with plastic and set tension packer in upper portion of 4 1/2" liner. Inject water down tubing.**

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ralph L. Gray*

TITLE

**Consulting Engineer.**

DATE

**June 27, 1967**

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

**267 JUN 29 AM 8 12**

CONDITIONS OF APPROVAL, IF ANY:

## Instructions

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**1G-029339 (a)**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <b>Convert to Water Injection</b>		7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR <b>WINDFOHR OIL COMPANY</b>		8. FARM OR LEASE NAME <b>Jackson "A"</b>	
3. ADDRESS OF OPERATOR <b>1202 First National Bank Bldg., Fort Worth, Texas 76102</b>		9. WELL NO. <b>3-X</b>	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>2000' from East and 1980' from South lines of Sec. 13-17S-30E.</b>		10. FIELD AND POOL, OR WILDCAT <b>Grayburg-Jackson, GB, SA</b>	
14. PERMIT NO.		15. ELEVATIONS (Show whether DF, RT, GR, etc.)	
		12. COUNTY OR PARISH <b>Eddy</b>	
		13. STATE <b>New Mexico</b>	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO :		SUBSEQUENT REPORT OF :	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) <b>Convert to Water Injection</b> <input checked="" type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**It is proposed to convert this well to a water injection well by the following work:**

- Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.**
- Pull rods and tubing, run Gamma Ray-Sonic and caliper logs.**
- 2-A. After reviewing logs, well will be deepened 30 to 40' if it appears desirable.**
- Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.**
- Run injectivity profile survey to locate zones taking water.**
- Cement 4½" O.D. J-55, 9.5# liner from bottom of hole to approximately 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off.**
- Perforate 4½" liner in San Andres, using sand jet.**
- Acidize perforations with small quantities.**
- Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.**

18. I hereby certify that the foregoing is true and correct

SIGNED *Ralph L Gray* TITLE Consulting Engineer. DATE June 27, 1967

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

67 JUN 29 AM 8 12

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 17:** Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**LC-029338 (a)**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> <b>Convert to Water Injection</b></p> <p>2. NAME OF OPERATOR <b>WINDFOHR OIL COMPANY</b></p> <p>3. ADDRESS OF OPERATOR <b>1202 First National Bank Bldg., Fort Worth, Texas 76102</b></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>660' from South and East lines of Sec. 14-17S-30E.</b></p>	<p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <b>Gissler "A"</b></p> <p>9. WELL NO. <b>4</b></p> <p>10. FIELD AND POOL, OR WILDCAT <b>Grayburg-Jackson, GB, SA</b></p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <b>Sec. 14-17S-30E</b></p> <p>12. COUNTY OR PARISH   13. STATE <b>Eddy   New Mexico</b></p>
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO :		SUBSEQUENT REPORT OF :	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) <input checked="" type="checkbox"/> <b>Convert to Water Injection</b>	<input checked="" type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

- It is proposed to convert this well to a water injection well by the following work:**
1. Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.
  2. Pull rods and tubing, run Gamma Ray-Sonic and caliper logs.
  3. Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.
  4. Run injectivity profile survey to locate zones taking water.
  5. Cement 4½" O.D. J-55, 9.5# liner from bottom of hole to approximately 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off.
  6. Perforate 4½" liner in San Andres, using sand jet.
  7. Acidize perforations with small quantities.
  8. Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.

18. I hereby certify that the foregoing is true and correct

SIGNED *Ralph L Gray* TITLE Consulting Engineer. DATE June 27, 1967

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE MAIN OFFICE

CONDITIONS OF APPROVAL, IF ANY:

## Instructions

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE\*  
(Other instructions on re-  
verse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**NM-074939**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Gissler "B"**

9. WELL NO.

**2**

10. FIELD AND POOL, OR WILDCAT

**Grayburg-Jackson, Gbg, SA**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**Sec. 24-17S-30E**

12. COUNTY OR PARISH 13. STATE

**Eddy**

**New Mexico**

1.

OIL WELL  GAS WELL  OTHER **Convert to Water Injection Well**

2. NAME OF OPERATOR

**WINDEHOR OIL COMPANY**

3. ADDRESS OF OPERATOR

**1202 First National Bank Building, Fort Worth, Texas 76102**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*

See also space 17 below.)

At surface **660' from North and West lines of Sec. 24-17S-30E.**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16.

**Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other) **Convert to Water Injection**

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**This form is submitted to replace program submitted June 8, 1967, for converting this producing well to a water injection well.**

1. Clean hole by lowering tubing to bottom and pump 50 barrels of hot water down casing. Remove water by pumping well dry.
2. Pull rods and tubing, run Gamma Ray-Sonic and caliper logs.
- 2-A. After reviewing logs, well will be deepened 40 to 50 feet if it appears desirable.
3. Load casing with water, and continue filling hole with water until water level in casing stands at approximately the surface.
4. Run infectivity profile survey to locate zones taking water.
5. Cement 4½" O.D. J-55, 9.5# liner from top of shot hole (approximately 3375') to 50' above 7" casing shoe. Test top of liner with 1800 psi. pressure for shut-off. Drill out to bottom of hole.
6. Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ralph L Gray*

TITLE

**Consulting Engineer.**

DATE

**June 27, 1967**

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

STATE OFFICE

'67 JUN 29 AM 9

## Instructions

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**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

SUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

**LC-030570 (a)**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

**Stevens "A"**

9. WELL NO.

**3**

10. FIELD AND POOL, OR WILDCAT

**Grayburg-Jackson, GB, SA**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**Sec. 13-17S-30E**

12. COUNTY OR PARISH

**Eddy**

13. STATE

**New Mexico**

1. OIL WELL  GAS WELL  OTHER  **Convert to Water Injection**

2. NAME OF OPERATOR

**WINFOHR OIL COMPANY**

3. ADDRESS OF OPERATOR

**1202 First National Bank Bldg., Fort Worth, Texas 76102**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)

At surface

**1980' from North and West lines of Sec. 13-17S-30E.**

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

**Convert to Water Injection**

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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4. Run injectivity profile survey to locate zones taking water.
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6. Perforate 4½" liner in San Andres, using sand jet.
7. Acidize perforations with small quantities.
8. Run tubing internally coated with plastic and set tension packer in upper portion of 4½" liner. Inject water down tubing.

18. I hereby certify that the foregoing is true and correct

SIGNED

*Ralph L Gray*

TITLE

**Consulting Engineer.**

DATE

**June 27, 1967**

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

67 JUN 29 AM 8 12

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