

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☐DEEPEN ☒R PLUGBACK ☒

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☐OTHER Water InjectionSINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Shelly Oil Company

## 3. ADDRESS OF OPERATOR

P.O. Box 730, Hobbs, New Mexico

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

At surface

660' FSL and 1980' FWL Section 22-178-31E

At proposed prod. zone

Grayburg and San Andres

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Seven miles southwest of Maljamar, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

## 16. NO. OF ACRES IN LEASE

520017. NO. OF ACRES ASSIGNED  
TO THIS WELL4018. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

3709'

## 20. ROTARY OR CABLE TOOLS

Workover Rig

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3835' DF

## 22. APPROX. DATE WORK WILL START\*

Immediately

## 23.

## Present and

## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH                    | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|----------------------------------|--------------------|
| 10"          | 8-5/8"         | 22.70           | 729'                             | 150                |
| 8"           | 7"             | 20.0            | 3523'                            | 475                |
| 6-1/4"       | 4-1/2"         | 10.50           | 3420-3709' liner /<br>new string | 290                |

Well is presently injecting water into the Grayburg formation through 7" CD casing perforations 3478-3510' (intervals) and open hole section 3523-3580'.

We propose to deepen approximately 129' in the San Andres, set liner and selectively perforate the Grayburg and San Andres formations as follows:

1. Move in and rig up Workover Rig.
2. Pull tubing and packer.
3. Run tubing with bit and deepen well to approximately 3709'.
4. Run Gamma-Ray Neutron log.
5. Set 290' of 4-1/2" CD casing liner from 3419' to 3709' and cement with approximately 290 sacks cement.

(See Back)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

TITLE

District SuperintendentDATE April 14, 1967

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

/pja

**APPROVED**  
R. L. BEEKMAN  
ACTING DISTRICT ENGINEER

\*See Instructions On Reverse Side

## 5. LEASE DESIGNATION AND SERIAL NO.

16-028412 (a)

## 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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## 7. UNIT AGREEMENT NAME

Shelly Unit

## 8. FARM OR LEASE NAME

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## 9. WELL NO.

56

## 10. FIELD AND POOL, OR WILDCAT

Grayburg Jackson11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREASection 22-178-31E

## 12. COUNTY OR PARISH

## 13. STATE

EddyNew Mexico

## Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws 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 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

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 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

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### 6. Clean out and test liner.

7. Perforate through 7"OD casing and 4-1/2"OD casing liner from 3234' to 3566' selectively in the Grayburg and 7 shots in the San Andres formation for a total of 30 shots.
8. Isolate and treat through 4-1/2"OD casing liner perforations of the San Andres formation with 1,000 gallons acid.
9. Isolate and treat through 4-1/2"OD casing liner perforations 3480-3566' (intervals) with 750 gallons acid.
10. Isolate and treat through 4-1/2"OD casing liner perforations 3234-3464' with 1,000 gallons acid.
11. Isolate and treat through 7"OD casing and 4-1/2"OD casing liner perforations 3234-3464' with 20,000 gallons water and 20,000# sand.
12. Pull retrievable bridge plug.
13. Run tubing and set packer above San Andres perforations.
14. Install dual injection equipment.
51. Water will be injected down the tubing into the San Andres Formation through 4-1/2"OD casing liner perforations and down the casing-tubing annulus into the Grayburg formation through 7"OD casing and 4-1/2"OD casing liner perforations 3234-3566' (intervals).