

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐DEEPEN ☐PLUG BACK ☒

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Southern Union Exploration Company

3. ADDRESS OF OPERATOR

Suite 1800, First International Building, Dallas, TX 75270

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

At surface

660' FSL & 1980' FEL

At proposed prod. zone

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

16 miles North of Carlsbad

15. DISTANCE FROM PROPOSED*

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

660'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

Only well

16. NO. OF ACRES IN LEASE

640 ARTESIA, OFFICE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

19. PROPOSED DEPTH

3730'

20. ROTARY OR CABLE TOOLS

Rotary

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

3490.9 G.L.

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 "	13 3/8"	48	353	375 sacks
12 1/4"	8 5/8"	24	2225	1450 sacks
4 1/2"	4 1/2"	9.5	3730	450 sacks

This well was drilled to the Morrow Formation, a T.D. of 10,200'. It was determined that the Morrow was not productive and verbal permission was given to plug back, set 4 1/2" casing and attempt a completion in the San Andres. The well was plugged back as follows:

1. 50 sks @ 9560
2. 50 sks @ 7948
3. 35 sks @ 5840
4. 35 sks @ 3887

The lower San Andres was perforated at 3584-3626 and treated. It produced water. The perforations were squeezed with 75 sacks of cement below a retainer. The cement was drilled out to 3582 and a C.I.B.P. was set at that point and tested to 2500 PSI. The well was perforated from 3562-3576 and treated. These perfs also made water.

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

Consulting Engineer for
Southern Union Expl. Co.

DATE

9/11/78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

ACTING DISTRICT ENGINEER

DATE

MAR 13 1979

CONDITIONS OF APPROVAL, IF ANY: