

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

Brazos Petroleum Company

3. ADDRESS OF OPERATOR

708 Petroleum Building, Midland, TX 79701

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

At surface 1650' FSL & 990' FEL, Sec. 18, T-9-S, R-38-E

At proposed prod. zone Same

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

15 miles east of Crossroads, NM

15. DISTANCE FROM PROPOSED*

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

330'

16. NO. OF ACRES IN LEASE

160

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

660'

19. PROPOSED DEPTH

5500'±

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

3963' GR

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	REMARKS
12 1/4"	8 5/8"	24#	2350'	700 sx	
7 7/8"	4 1/2"	10.5#	5200'±	300 sx	

Blowout Preventer: 10" X 900 Series Shaffer Double Ram

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

Joe T. Janice

TITLE

Agent

DATE

11/3/80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

(Orig. Sgd.) GEORGE H. STEWART

TITLE

ACTING DISTRICT ENGINEER

DATE

NOV 07 1980

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form No. 1
Supersedes Order
No. 100-100

All distances must be from the outer boundaries of the section

Operator Brazos Petroleum Co.		Yates 13 Fed.		1
Unit Letter 1	Section 18	9 South	38 East	Leo
Actual Portage Location of Well 1650 feet from the south 990 feet from the east				
Original Plat File 3962.9	San Andres Sawyer 40			

- Outline the acreage dedicated to the subject well, by colored pencil or ink, on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership, term of that ownership, interest and royalty.
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated, (if so reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Pat. Janice
Agent
Brazos Pet Co
11/4/80

I hereby certify that the well location shown on this plat was plotted from field notes or actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Oct. 25, 1980

John W. West
Certified by JOHN W. WEST 678
PATRICK A. ROMERO 6883
Ronald J. Edson 3232

APPLICATION TO DRILL

Brazos Petroleum Company
Yates '18' Federal No. 1
Section 18, T-9-S, R-38-E
Lea County, New Mexico

In response to questions asked under Section II B of Bulletin NTL-6, the following answers are provided for your consideration:

1. Location: 1650' FSL & 990' FEL, Section 18, T-9-S, R-38-E, Lea County, New Mexico
2. Elevation Above Sea Level: 3963'
3. Geologic Name of Surface Formation: Alluvium
4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using mud for the circulation medium
5. Proposed Drilling Depth: 5200'±
6. Estimated Geological Marker Tops: Yates 2920'; San Andres 4200'; Pi Marker 4760'; San Andres porosity 4920'.
7. Mineral Bearing Formation: Water bearing - none; gas bearing - none; oil bearing - San Andres at 4920'.
8. Casing Program: (A) Surface casing - 8 5/8" 24#/ft K-55 new casing. (B) Production casing - 4 1/2" 10.5#/ft K-55 new casing.
9. Setting Depth of Casing and Cement for Same: (A) 8 5/8" casing set at 2350'±. Cement will be circulated to surface using 500 sacks of Halliburton Lite with 3# gilsonite/sack, 1/4# flocele/sack, 0.2% CaCl₂; followed by 200 sacks Class 'C', 0.2% CaCl₂. (B) 4 1/2" casing set at 5200'± and will be cemented with 300 sacks Class 'C', 50-50 pozmix, 8# salt/sack, 3% CFR-2, 1/4# flocele/sack.
10. Pressure Control Equipment: Blowout preventers will be installed on the surface casing. They will be 10" API Series 900 dual preventers adapted for the drilling contractor's 4 1/2" and 5 1/2" drill pipe. They will be capable of closing off on all open areas. The blowout preventers will be hydraulically actuated by an 80-gallon Payne accumulator. The blowout preventers will be tested to 2000 psig after they are installed on the surface casing, prior to drilling out and each time they are removed or rearranged on the wellhead.

11. Proposed Circulation Medium: Mud will be used for the circulating medium for all depths in this well. The following mud properties will be maintained: Viscosity sufficient to clean hole; weight 9.5-10.0 ppg; viscosity through pay zone 45 to 50 for good samples.
12. Testing, Logging and Coring Programs: (A) Testing - All testing will be commenced after the well is drilled and casing has been set and cemented. (B) Logging - At total depth the following logs will be run: 0 - 5200'± sidewall neutron porosity with gamma ray and caliper, dual laterolog, micro-SFL. (C) No coring.
13. Potential Hazards: No abnormal pressure or temperature zones are anticipated. Hydrogen sulfide gas is not expected to be a problem; however, the drilling rig will be so situated as to allow all gas vapors to be expelled away from all personnel gathering sites and engine exhausts.
14. Anticipated Starting Date and Duration of Operations: Commence November 10, 1980. Three weeks to completion on November 31, 1980.
15. Other Facets of Operation: After running 4 1/2" casing, cased hole gamma ray collar correlation logs will be run from total depth to 4200'±. The San Andres porosity pay will be perforated and acidized. The well will then be swab tested and a pumping unit will be installed to potential and produce the well.