Form 9-331 C
(May 1963)

SUBMIT IN TRIPLI 3*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-025-21627

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
TEXAS PACIFIC OIL CO., INC.

3. ADDRESS OF OPERATOR
P. O. Box 1069 - Hobbs, New Mexico 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
Unit G 1980' FNL & 1980' FEL
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
NM 1410

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Elliott B-17

9. WELL NO.
4

10. FIELD AND POOL, OR WILDCAT
UNDESIGNATED
Drinkard

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 17, T-22-S, R-37-E

12. COUNTY OR PARISH
Lea

13. STATE
New Mexico

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1980'

16. NO. OF ACRES IN LEASE
314

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

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

19. PROPOSED DEPTH
7450'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3395.8' GR

22. APPROX. DATE WORK WILL START*
Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8"	24#	1160'	450 CIRCULATE
7-7/8"	5-1/2"	14 & 15.5#	7450'	180% of Caliper Volume To fill to Base Salt

It is anticipated that this well will be completed in the Drinkard (oil) pool. However, it will be drilled to a depth sufficient to evaluate the Devonian zone by drill stem testing and logging. Completion will be attempted in the Devonian if this data indicates it to be productive.

See Attachments: "Development Plan for Surface Use"
Drilling Procedure
Casing & Cementing Program
Mud & Logging Program

Blowout Preventer Program: Drilling rig to be equipped with a 10" Shaeffer Type "B", double ram (pipe and Blind), series 900, 3000 psi working pressure preventer with manual and hydraulic controls. Equipment to be tested when installed and on trips after drilling out of surface casing.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive one. 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.

SIGNED Original Signed by Lloyd Wright TITLE Area Superintendent DATE 1-15-74

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED AS AMENDED JAN 25 1974 ARTHUR R. BROWN DISTRICT ENGINEER

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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.

☆ GPO 782-931

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator	Lease	
TEXAS PACIFIC OIL COMPANY	ELLIOTT B-17	4

Unit Letter	Section	Township	Range	County
G	17	22 South	37 East	Lea

Actual Footage Location of Well:
1980 feet from the North line and 1980 feet from the East

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3395.8	~~Drinkard~~ Dev	Drinkard UNDESIGNATED	40

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

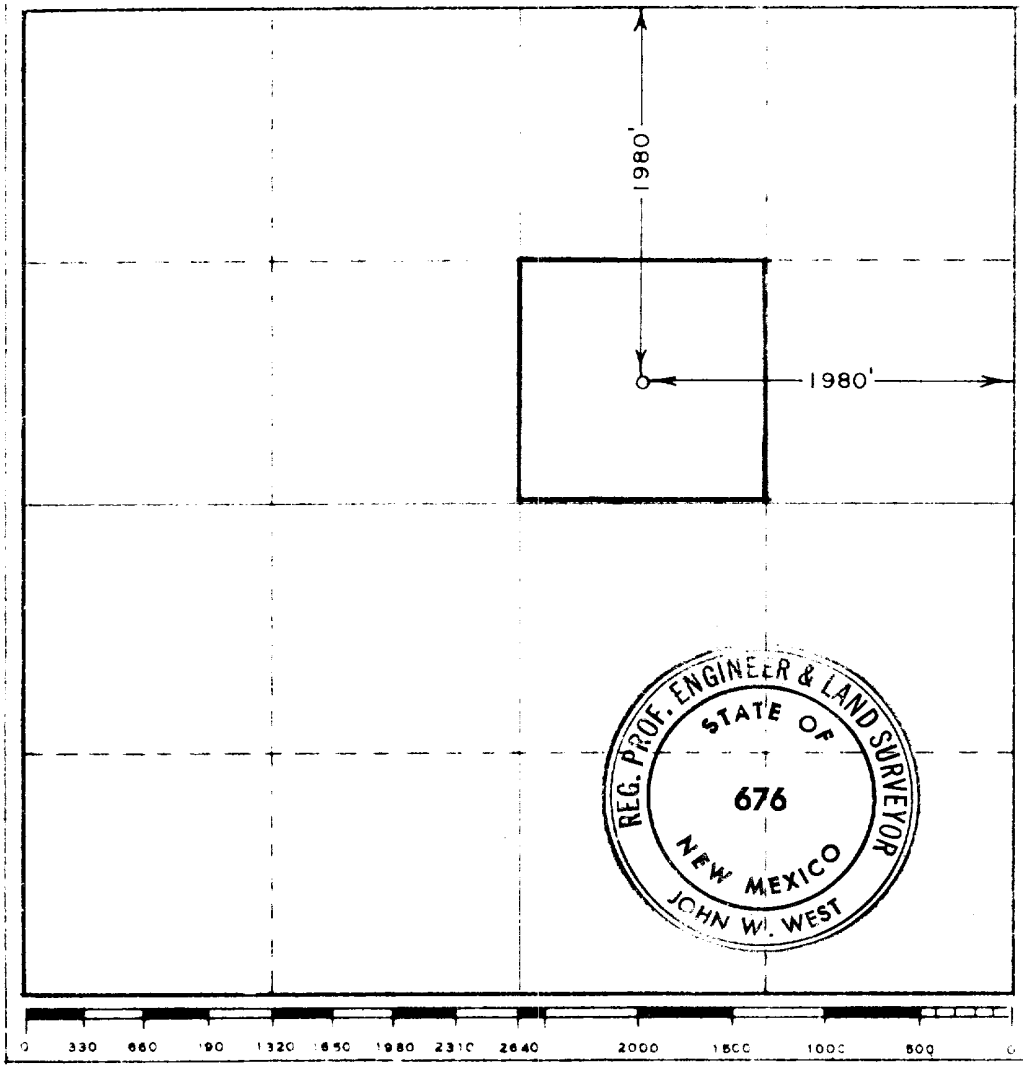
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, 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. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, 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.

Name: Lloyd A. Wright

Position: Area Superintendent

Company: TEXAS PACIFIC OIL CO., INC.

Date: 12-17-73

I hereby certify that the well location shown on this plat was plotted from field notes of 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.

Date Surveyed: December 15, 1973

Registered Professional Engineer and/or Land Surveyor: John W. West

Certificate No. 676

DEVELOPMENT PLAN FOR SURFACE USE

TEXAS PACIFIC OIL CO., INC.
ELLIOTT B-17 Well No. 4
1980' FN&EL Sec. 17, T-22-S; R-37-E
Drinkard Pool - Lea Cty., New Mexico

1. Existing roads including location of the exit from the main highway.

   See Attachment No. 1

2. Planned access roads.

   See Attachment No. 2. Road will be 12' wide, 2310' in length, and will be constructed of compacted caliche 6" in depth.

3. Location of existing wells.

   See Attachment No. 2

4. Lateral roads to well locations.

   See Attachment No. 2

5. Location of tank batteries and flow lines.

   See Attachment No. 2. The existing tank battery serving Texas Pacific's Elliott B-17 No. 3 will be utilized in the event production is established.

6. Location and type of water supply.

   Drilling operations will utilize fresh water spud mud from surface to 1,160 and 9 lb./gal. brine water (with additives) from 1,160' to total depth of 7,450'. All water will be purchased from local commercial suppliers, and will be stored at the site during drilling operations. See Attachment No. 3

7. Methods for handling waste disposal

   Drill cuttings and associated drilling fluids will be collected in a plastic lined dirt pit. After drilling is completed, liquids will be allowed to evaporate and the pit will then be levelled using a bulldozer. Unused drilling fluids or brine water in tanks will be hauled away. Trash, garbage, etc., collected during drilling operations will be hauled away.

8. Location of camps.

   Not applicable

9. Location of airstrips.

   Not applicable

10. Location of layout to include position of the rig, mud tanks, reserve pits, etc.

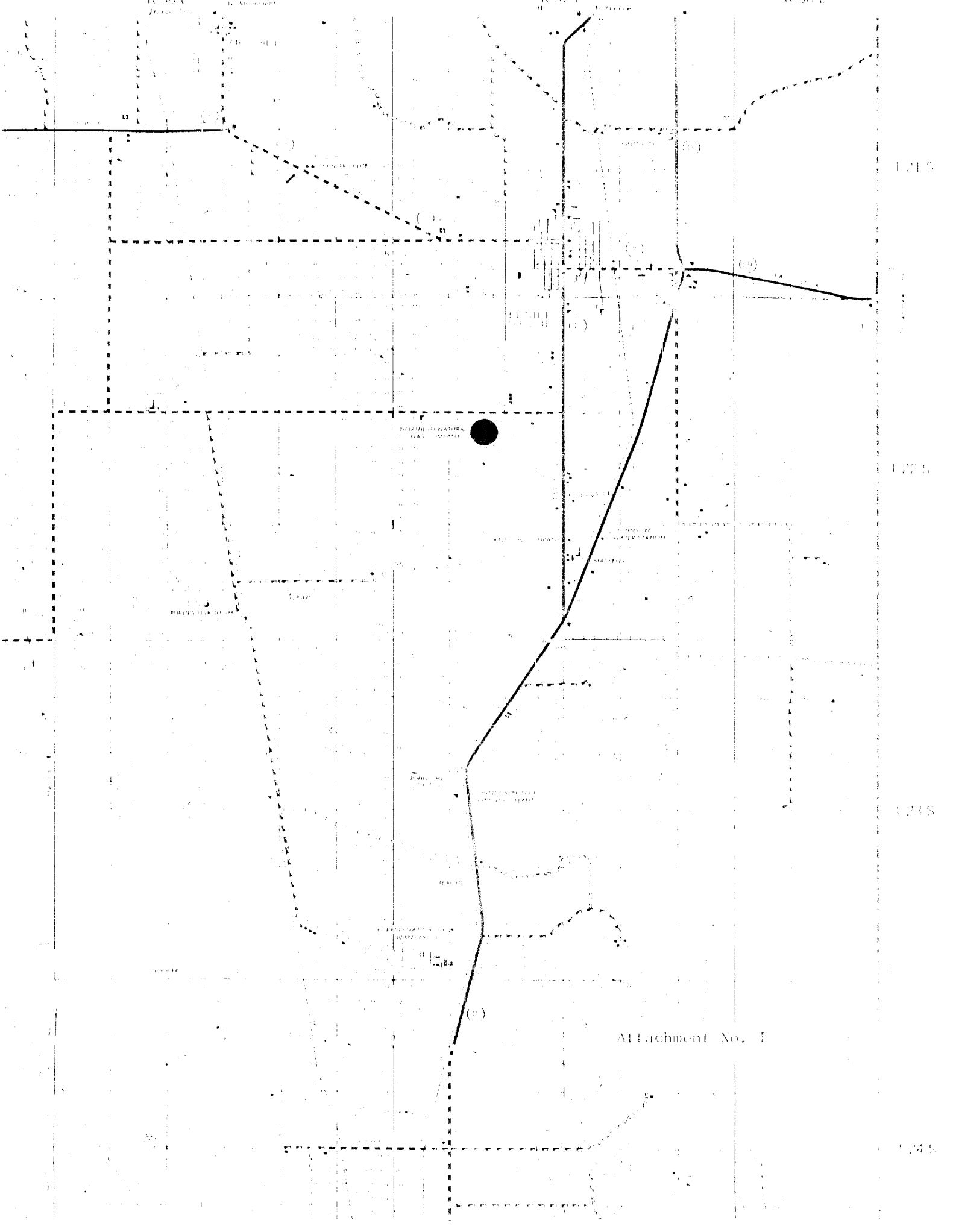
    See Attachment No. 3

11. Plans for restoration of the surface.

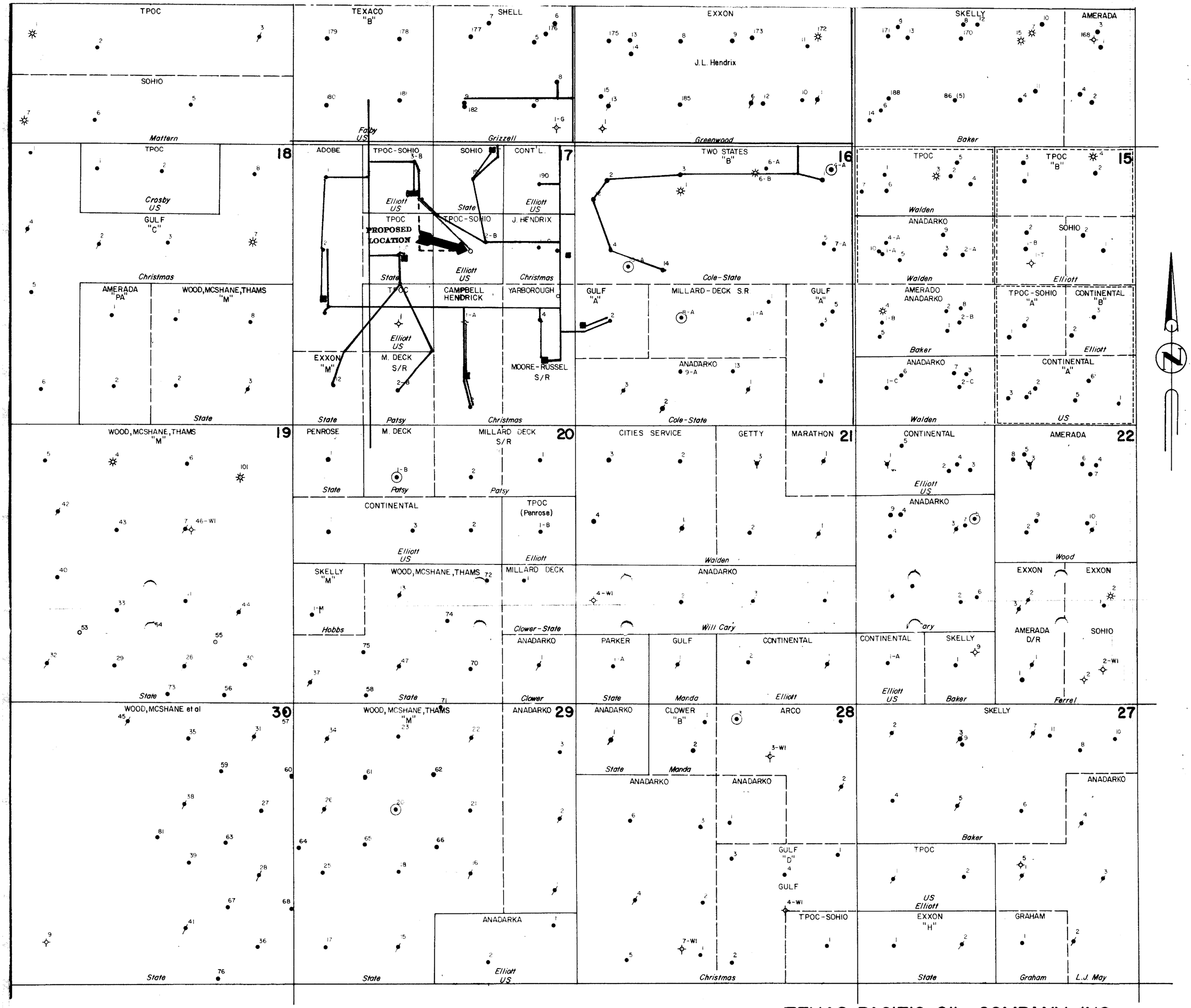
    Upon completion of drilling operations, the drill site surface will be levelled using a bulldozer. Since the surface lessee will have been paid for any permanent damage to land from construction of the drill site and laying of flow line we do not anticipate further restoration efforts.

12. Any other information that may be used in evaluating the impact on environment.

    The area around the proposed drill site is flat, sandy rangeland. Vegetation consists primarily of mesquite bushes, oak shrubs, and range grass. There are no nearby streambeds, watercourses, lakes or ponds. There is no crop land in the immediate vicinity.



Attachment No. 1



— Surfaced Roads
— Lease Access Roads
— Lease Flow Lines
■ Lease Tank Batteries
– – – Proposed Access Road & Improvements to Existing Roads
——— Proposed Flow Line to Existing Battery

TEXAS PACIFIC OIL COMPANY, INC

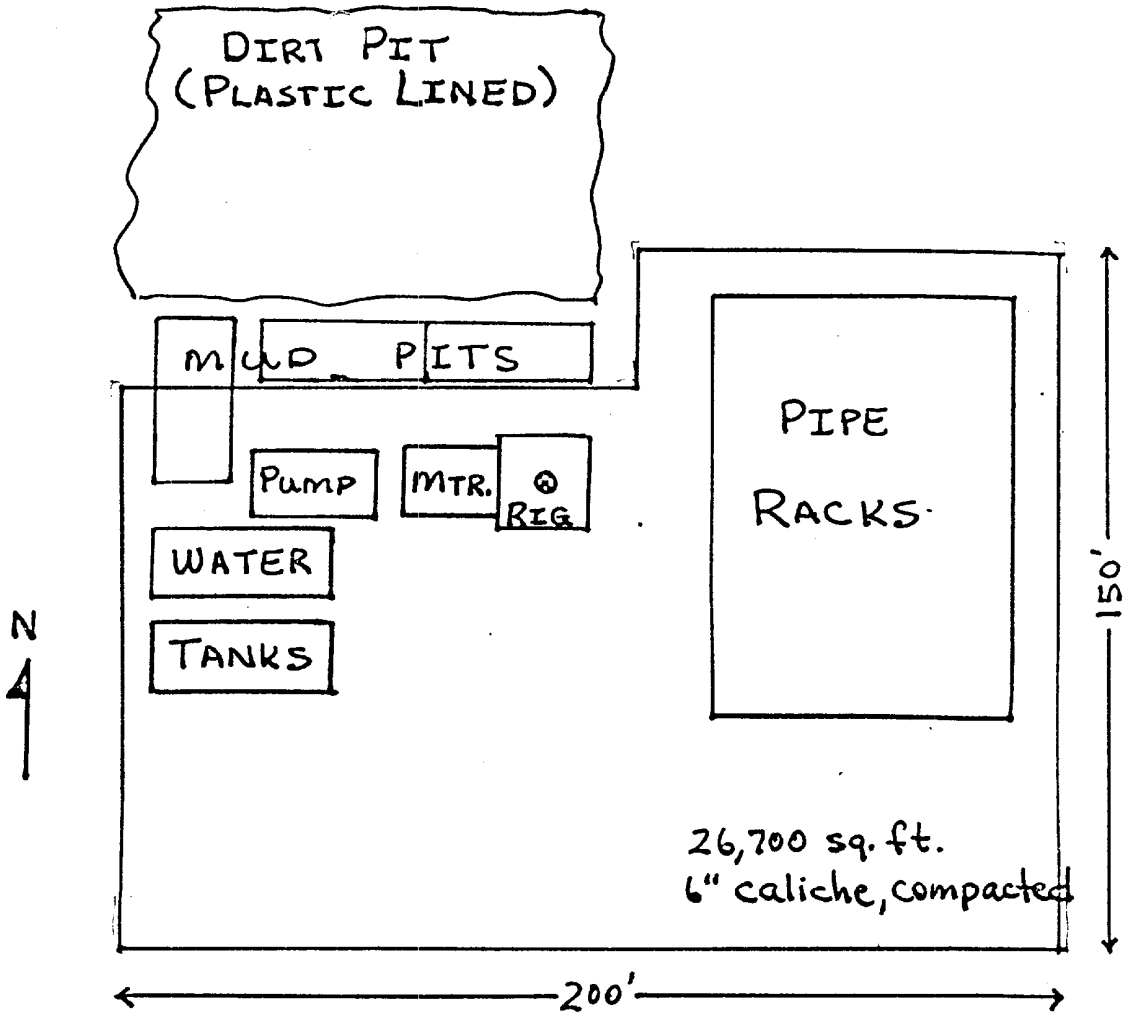
MIDLAND DISTRICT

Elliott B-17 Lease
Lea County, New Mexico
T-22-S R-37-E

Attachment No. 2

SCALE : 1" = 1000'

DATE _____
BY : _____



Scale: 1" = 40'

TOPOGRAPHY: Flat, sandy rangeland. No nearby watercourse, streambed, or crops.

TEXAS PACIFIC OIL CO., INC.
ELLIOTT B-17 NO. 4
1980' FN & EL SEC 17 T22S-R37E
LEA COUNTY, NEW MEXICO

Attachment No. 3

TEXAS PACIFIC OIL COMPANY

DRILLING PROCEDURE TP-105-B

DATE: December 12, 1973

DISTRICT/AREA: Midland/Hobbs

AFE NO.: 70685

LEASE NAME AND WELL NUMBER: Elliott B-17 Well No. 4

FIELD: Drinkard

LOCATION: 1980' FN & EL, Sec. 17, T-22-S, R-37-E

COUNTY/PARISH: Lea County

STATE: New Mexico

INSTRUCTIONS: List on drilling report each lost circulation zone and amount of mud lost. List on Company reports all mud, chemicals, lost circulation material and oil used in drilling mud each tour. Strap drill pipe on first trip under surface and before logging, testing, or coring.
Tool pusher will be responsible to obtain and to check all tallies on tubular goods received at well, as well as check accuracy on delivery tickets of other material delivered to well.

SUPERINTENDENT'S SIGNATURE: M C Boyd

ENGR. APPROVAL: TJ Lowery

GEOL. APPROVAL:

CASING PROGRAM

STRING	SIZE	LENGTH OF SECTION	WEIGHT	GRADE	THREAD	HOLE SIZE	ALLOWED CEMENT TIME-HRS
Surface (0 - 1160')	8 5/8"	1160'	24#	K-55	ST&C	11"	24
Production (0 - 7450')	5 1/2"	100'	15.5#	K-55	ST&C	7 7/8"	24
	5 1/2"	4900'	14#	K-55	ST&C	7 7/8"	24
	5 1/2"	2450'	15.5#	K-55	ST&C	7 7/8	24

NOTE: All casing to be Range 3.
Bottom three (3) joints of 8 5/8" to be sand blasted.
Bottom 1500' of 5 1/2" to be sand blasted.

CEMENT PROGRAM

SEE ATTACHMENT

MUD PROGRAM

DEPTH	TYPE	MUD WEIGHT	VISCOSITY	Ph	WATER LOSS
0 - 1160'	Fresh water spud mud	8.4-8.8	28-30	-	NC
1160 - 6000'	Brine water w/lime	9.2+	28-30	10	NC
6000' - TD	Brine water w/lime, gel & Drispac	9.2+	30-36	10	8-10

DEVIATION FROM VERTICAL: NOT TO EXCEED 3 DEGREES PER 1000FT; NOT TO EXCEED 6 DEGREES AT ANY DEPTH

EXPECTED FORMATION TOPS

DESCRIPTION*	DEPTH	SUB SEA
Anhydrite	1080	+2325
Yates	2650	+ 755
Grayburg	3610	- 205
Blinebry	5515	-2110
Drinkard	6380	-2975
Devonian	7205	-3800

LOGGING, CORING & TESTING PROGRAM: DST Devonian @ + 7250'. Logs run at total depth only. GR-SNP, Laterolog and MLL from TD to 2600'. Pull GR to surface.

TOTAL CONTRACT DEPTH: 7450'

MUD SUPPLIER:

MECHANICAL RATE OF PENETRATION DEVICE REQUIRED: YES X; NO

SAMPLE PROCEDURE

10' drilling samples from 2500' to TD.
10' drilling time (or 2' as needed) from 2000' to TD.

EQUIPMENT OR SERVICES MAY BE INSTALLED AT FOLLOWING:

EQUIPMENT	DEPTH

UNUSUAL PROBLEMS AND/OR REMARKS

Salt section from approximately 1200' to 2400'.

Estimated elevation: 3405'

PERSONNEL

NAME & TITLE	CITY	OFFICE PHONE	RESIDENCE PHONE NUMBER
Sheldon Ward, Drilling Foreman	Midland	684-5584	682-7180
Buddy Knight, Drilling Engineer	Midland	684-5584	697-1349
L.A. Wright, Area Superintendent	Hobbs	393-4167	393-4646
M.L. Schroeder, Engineer	Midland	684-5584	684-9069
T.P. Frizzell, Geologist	Midland	684-5584	694-7944

* TYPE POSSIBLE PRODUCTIVE HORIZONS IN CAPITAL LETTERS; OTHER HORIZONS IN LOWER CASE.

ELLIOTT B-17 WELL NO. 4
SEC. 17, T-22-S, R-37-E
LEA COUNTY, NEW MEXICO

CASING PROGRAM

Surface Casing

0 - 1160'	8 5/8", 24#/ft., K-55 ST&C 8-rd

Production Casing

0 - 100' (100')	5 1/2", 15.5#/ft., K-55 ST&C 8-rd
100 - 5000' (4900')	5 1/2", 14#/ft., K-55 ST&C 8-rd
5000 - 7450' (2450')	5 1/2", 15.5#/ft., K-55 ST&C 8-rd

All casing to be Range 3.
Sand Blast: 1. Bottom three joints 8 5/8"
2. Bottom 1500' 5 1/2"

WCY:kg
12/12/73

ELLIOTT B-17 WELL NO. 4
LEA COUNTY, NEW MEXICO

CEMENT PROGRAM

SURFACE

Hole (Bit) Size:	11"
Casing Size:	8 5/8"
Approximate Setting Depth:	1160'
Estimated BHT:	75°F
Rate, BPM:	5 to 6
WOC Time:	24
Test Pressure:	1000 PSIG - 30 Mins

No caliper. Volume of cement equivalent to 200% of theoretical hole size. Cement to circulate. Use 450 sx CLASS "C" W/2% $CACL_2$, 14.8 PPG, 1.32 FT^3/SK yield.

Equipment Required:
One (1) Guide Shoe
One (1) EZ-LOK Clamp
One (1) Insert Float
Three (3) S-3 Centralizers
One (1) LB Howco Weld-A

Threadlock shoe and bottom two (2) joints. Centralizers installed on middle of shoe joint and next two collars above shoe joint.

PRODUCTION

Hole (Bit) Size:	7 7/8"
Casing Size:	5 1/2"
Approximate Setting Depth:	7450'
Estimated BHT:	115°F
Rate, BPM:	6 to 8
WOC Time:	24
Test Pressure:	1500 PSIG - 30 Mins

Volume of cement equivalent to 140% of calipered hole size (use caliper from openhole porosity log). The lead slurry should be calculated to fill from 5000' to 2500' and the tail-in slurry should be calculated to fill from total depth to 5000'. Displace the plug with 500 gals of 10% acetic acid and 1% KCL water.

Lead Slurry _____ sx HLW W/1/4 lb/sx FLOCELE, mixed at 12.4 ppg, yield 1.97 ft^3/sk.

Tail-in Slurry _____ sx CLASS "C" w/6 lbs/sk salt, mixed at 15.0 ppg, yield 1.35 ft^3/sk.

WOC 8 to 10 hrs. Run temperature survey to determine cement top.

Equipment Required:
One (1) Guide Shoe
One (1) Float Collar
Ten (10) S-3 Centralizers
One (1) lb Howco Weld-A

Threadlock shoe, float collar, and bottom two (2) joints. Install centralizers through the Devonian, Drinkard and Blinebry intervals.

BJK:fe

ELLIOTT B-17 WELL NO. 4
SEC. 17, T-22-S, R-37-E
LEA COUNTY, NEW MEXICO

LOGGING PROGRAM

1160' to TD	GR- SNP w/caliper, GR-Laterolog and GR-Micro-Laterolog. Pull Gamma Ray to surface.

WCY:kg
12/12/73