Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HOBBS OFFICE O. C. C.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

MAY 19 10 08 AM '64

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Tenneco Oil Company

3. ADDRESS OF OPERATOR
Box 1031, Midland, Texas

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
660' FSL & 1980' FEL of Sec. 6
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
NM 0309376

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
USA-Continental

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 6, T-19-S, R-32-E

12. COUNTY OR PARISH | 13. STATE

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. line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	202.68	40 160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH	20. ROTARY OR CABLE TOOLS
None	11,800	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3640 DF (Estimated)

22. APPROX. DATE WORK WILL START*
May 19, 1964

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

See prognosis and plats attached

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 A. W. Lang TITLE District Production Supt. DATE May 13, 1964

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAY 15 1964
A. R. BROWN
DISTRICT ENGINEER

*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.

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NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE O. C. C.

FORM C-128
Revised 5/1/57

WELL LOCATION AND ACREAGE DEDICATION PLAT

MAY 19 10 AM '64

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator	Lease	Well No.
TENNECO OIL COMPANY	USA CONTINENTAL	1

Unit Letter	Section	Township	Range	County
O	6	19 SOUTH	32 EAST	LEA

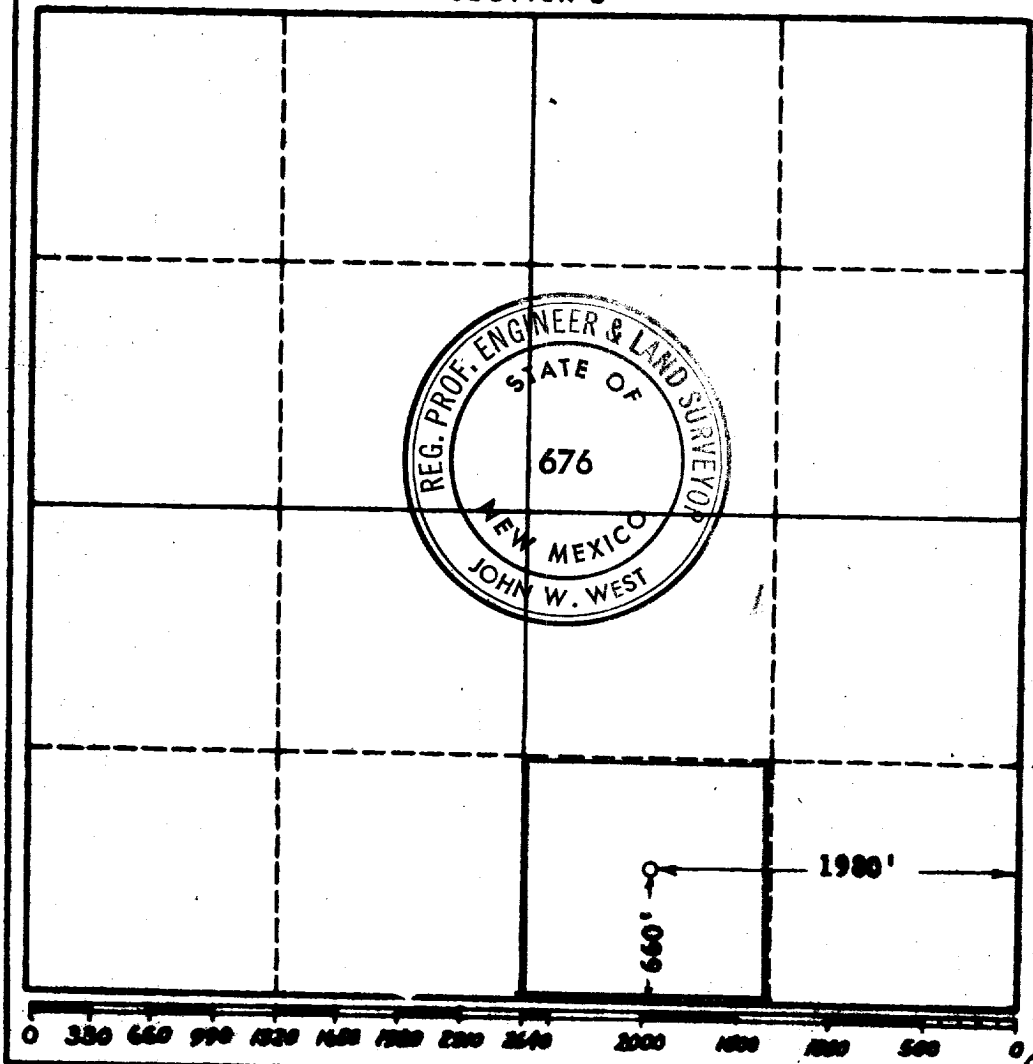
Actual Footage Location of Well:
660 feet from the SOUTH line and 1980 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
[illegible]	[illegible]	[illegible]	[illegible] Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES X NO ____. *("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)*
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ____ NO ____. If answer is "yes," Type of Consolidation ____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

SECTION B



CERTIFICATION

I hereby certify that the information in *SECTION A* above is true and complete to the best of my knowledge and belief.

Name [illegible]

Position [illegible]

Company [illegible]

Date [illegible]

I hereby certify that the well location shown on the plat in *SECTION B* 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
MAY 13, 1964

Registered Professional Engineer and/or Land Surveyor, JOHN W. WEST

John W. West

Certificate No.
N. M. - P.E. & L.S. NO. 676

TENNECO OIL COMPANY
DRILLING PROGNOSIS

LEASE: USA-Continental WELL NO.: 1

DISTRICT: Midland FIELD: Lusk Strawn

PROJECTED TD: 11,800 ESTIMATED ELEVATION: 3640 DF

LOCATION: 1980' FEL & 660' FSL of Section 6, T-19-S, R-32-E, Lea County, New Mexico

DRILLING, CASING AND CEMENTING:

1. Drill 17 1/2" hole to approximately 650'.

2. Cement 13 3/8", 48#/ft, H-40, ST&C casing @650' w/sufficient 50-50 Incor Posmix w/2% $CaCl_2$ to circulate. Run bar centralizers on float shoe and bottom 2 joints. A guide shoe and insert float will be run.

3. If float valve holds, release pressure, WOC 6 hrs, install B.O.P., and nipple up.

4. After WOC 12 hrs., pressure test csg w/1000 psi for 30 min. and drill out.

5. Drill 11" hole to approximately 3800'.

   NOTE: Loss of circulation may be encountered between 3000' and 3500'. If severe at this location, hole may be "dry drilled" to intermediate point or air equipment may be used. Do not exceed 20,000# bit weight and 60 rpm until 1st three drill collars are below casing shoe. Air equipment, if used, shall be at company expense.

6. At Intermediate Point, Run 8 5/8" OD casing as follows:

   0-3800' - 32#/ft., J-55, ST&C

   A guide shoe will be used with insert float in second collar. Weld-on bar centralizers will be run on shoe and first two collars.

7. Cement with approximately 200 sx 50-50 Posmix-Incor w/6% gel followed by 100 sx Incor w/2% gel. Exact cement volume will be determined by caliper survey. Cement must fill to base of salt section. All cement to contain 2% calcium chloride. Condition mud ahead of cement with 1# Soldium Bichromate & 0.2# caustic sod soda per bbl.

8. If float holds, land casing as cemented, release pressure and nipple up BOP. WOC 12 hrs., pressure test casing to 1000 psi for 15 min. and drill out cement. Do not exceed 20,000# weight on bit and 60 rpm until 1st three drill collars are below casing shoe.

9. Drill 7 7/8" hole to approximately 11,800'.

10. Run 4 1/2" casing as follows:

    0 - 3,300' - 11.6 N-80, LT&C
    3300 - 8,000' - 11.6 J-55, ST&C
    8000 -11,800' - 11.6 N-80, LT&C

(10. cont.)

Casing will be run with float shoe, differential fill-up collar and sufficient reciprocating scratchers and centralizers to cover productive interval.

11. Cement w/sufficient 50-50 Pozmix "S" cement w/0.4% HR-4 to cover all zones of interest. 2 sx of lime in 10 bbl. water ahead of cement. Add 2 sx sodium Bichromate to mud system prior to running casing. Tail in with Latex to cover 150 feet above pay zone. Approximately 60 sx required.

12. If floats hold, land casing as cemented, WOC 8 hrs., run temperature survey. (Well may be completed with rig over hole).

DRILLING FLUIDS PROGRAM:

1. Surface Hole - 0 to 650'. Spud mud. Add gel and lime as needed to clear hole. Use fiber for loss of circulation as needed.

2. Intermediate Hole - 650' to 3800'. Saturated brine water. Add water to maintain minimum viscosity necessary. Pretreat system w/fiber (6 to 8 pounds per bbl.) at 3000'. If hole gives trouble, lower water loss to 20 cc to run casing.

   NOTE: If severe loss of circulation is encountered below 3000', hole will be "dry drilled" to intermediate point or air equipment may be installed. Drilling should not be stopped to combat loss of circulation.

3. Below intermediate:

   3800' to 11,200': Clear water treated with surfactant, Some treatment w/paper may be required to reduce losses.

   11,200' to TD: Use low-solids, CMC system with the following properties:

   Weight: 9.5 to 9.8
   Viscosity: 38-42
   Water loss:20-25

   Add chemicals and barite as required to maintain good hole conditions to total depth.

DRILLING TIME:

1. A recorder with torque, hook load, pump pressure, and rate of penetration will be required.

2. Record 10' drilling time from Kelly measurements from surface to TD on company forms.

DRILL PIPE MEASUREMENTS:

1. Strain strap drill pipe at all casing points, coring points, and TD.

DBO:

DRILLING SAMPLES:

1. Two sets of 10' samples will be caughts, washed, sacked and labeled in bundle of 100' from surface to TD.

2. Circulating and additional samples will be obtained as directed.

3. Quart samples will be obtained of all fluids recovered on DST.

DEVIATION:

1. Deviation surveys shall be taken on every trip or every 500', whichever is first.

2. Maximum deviation shall be allowed as follows:

0 - 2000'	: 2°	8000 - 10,000'	: 6°
2000 - 4000'	: 3°	10000 - TD	: 7°
4000 - 6000'	: 4°		
6000 - 8000'	: 5°		

Deviation in the surface hole shall not exceed 1°.

3. Deviation should not change more than 1 1/2° in any 100' interval. If deviation change exceeds 1 1/2° per 100', string reamer shall be run to wipe out dogleg. If deviation change exceeds 2° per 100', hole shall be plugged back and straightened.

BLOW OUT PREVENTORS:

1. Series 900 or better, double ram, manual and remote control preventors shall be used from base of surface casing to TD.

2. BOP shall be checked daily and reported on drilling report.

3. A rotating drilling head shall be used during any air or gas drilling.

DAILY DRILLING REPORT:

1. The AAODC drilling form shall be used.

2. This report shall be completely filled out except for crew hours.

3. Morning reports shall be made to the Midland District Office each weekday morning between 8:00 A.M. and 8:30 A.M. CST.

DRILL STEM TESTING:

One DST may be taken in the following intervals:

Strawn - 11,450' to 11,650'

Added tests may be taken at discretion of wellsite geologists.

LOGGING:

1. Integrated GR Sonic Logs intermediate to TD.
2. Induction ES through detailed sections as specified by wellsite engineer.

FORMATION TOPS (APPROXIMATE):

T/Anhydrite	900'
T/Salt	1,200'
B/Salt	2,700'
T/Yates	2,980'
T/Seven Rivers	3,250'
T/Delaware	5,650'
T/Bone Springs	7,350'
T/Wolfcamp	10,350'
T/Strawn	11,385'
T/Strawn Reef	11,515'

A W Lang

J. F. Cannes

S. F. Desadia

INSTRUCTIONS FOR DRILLING OF WELL

1. Keep hole full at all times.

2. If sticking conditions occur, do not pull over half the weight of the drill string past its total weight before contacting company man.

3. Check recorder daily and make sure it is recording on all pens accurately.

4. Be sure all fires and lights are out while drill stem testing.

5. Fill out AAODC report completely, enter all mud used, see that break down of hours is complete and accurate.

6. Do not waste water or mud, both items are very expensive. See that mud is stacked orderly at all times, if a sack is broken, use it the first opportunity.

7. If unusual conditions are noticed with the hole, be sure the company man, tool pusher and all drillers are notified.

8. Use blackboard or tablet to leave any information or orders on.

9. Check blow out equipment daily, do not let water accumulate in closing unit or lines.

10. Drilling from 2800' - intermediate point - don't use float in drill pipe.

11. From 2800' (intermediate point) reduce lowering drill pipe into hole rate to one minute/stand.