

### UNITED STATES DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY P. O. Dresser U Artesia, New Mexico

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January 24, 1964

Tenneco Cil Company P. O. Box 1031 Midland, Tenna

Re: Las Cruces 969881 Expiring January 31, 1964

#### Gentlemen:

Your Notice of Intention to Brill well No. 1 Hondo Federal (copy attached) in the SERSE, sec. 6, T. 17 S., R. 28 E., H.M.P.M., Eddy County, New Mexico to a depth of 7,800 feat to test the Wolfcamp formation is hereby approved subject to compliance with the provisions of the Oil and Gas Operating Regulations and subject to the following conditions:

- Drilling operations so authorised are subject to the attached sheet for general conditions of approval.
- A daily progress report is to be furnished in duplicate from spud date until completion of the well.
- Drilling rig must not be moved from well without prior approval from the Survey (30 CFR 221.34c).

If the lease is to be considered for extension by diligent drilling operations, the lease rental must be timely paid.

Very truly yours,

James A. Knauf District Engineer

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#### UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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SUBMIT IN '.ICATE\*

(Other instance on reverse side)

Form approved. No. 42-R1 25.

### UNITED STATES DEPARTMENT OF THE INTERIOR

	5. LEASE DESIGNATION AND SERIAL NO.  LC 069881							
APPLICATION	I FOR PERMIT T	O DRILL, DEEP	PEN, OR PLUG	BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME			
a. TYPE OF WORK  DRI b. TYPE OF WELL		DEEPEN 🗌	PLUG BA	CK 🗆	7. UNIT AGREEMENT NAME			
OIL TO GA	AS OTHER		SINGLE X MULTIN	PLE	8. FARM OR LEASE NAME			
2. NAME OF OPERATOR					Hondo Federal			
TENNECO OIL	COMPANY				9. WELL NO.			
3. ADDRESS OF OPERATOR	~ ma				10. FIELD AND POOL, OR WILDCAT			
P. O. BOX 1 4. LOCATION OF WELL (R	O31, Midland, Teport location clearly and	EXAS in accordance with any	State requirements.*)		Wildcat			
At surface	660' FEL of Se				11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA			
•					See. 6, T-17-S, R-28-F			
14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	REST TOWN OR POST OFF	ICE*		12. COUNTY OR PARISH 13. STATE			
15. DISTANCE FROM PROP	OSED*	16.	NO. OF ACRES IN LEASE		OF ACRES ANSIGNED NEW MEXIC			
LOCATION TO NEARES PROPERTY OR LEASE LIM (Also to nearest drlg	T 66	01	920	TO	TO THIS WELL			
18. DISTANCE FROM PROF TO NEAREST WELL, D	OSED LOCATION*	19.	PROPOSED DEPTH	20. кот.	ARY OR CABLE TOOLS			
OR APPLIED FOR, ON TH	IS LEASE, FT.	Wildcat	7800'		Rotary 22. APPROX. DATE WORK WILL START*			
21. ELEVATIONS (Show wh								
<u> </u>	GL (Estimated)	DODOGED GAGING A	ND CEMENTING PROGR	AM	Upon Approval			
					OV VOICE OF CRANCE			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	_	QUANTITY OF CEMENT			
			_		ED			
					RECEIVE			
					RECEIVED JAN 27 1934			
	SEE PROGNOS	GIS AND PLATS A	ATTACHED.		JAN 2 / 1854			
					157			
				1	( <b>(</b> ) ( ) ( )			
			$\mathcal{Y}_{i,j}$		ACT OF STREET			
IN ABOVE SPACE DESCRIB zone. If proposal is to preventer program, if as	drill or deepen direction	proposal is to deepen oally, give pertinent dat	or plug back, give data on a on subsurface locations	present pro and measur	oductive zone and proposed new productive and true vertical depths. Give blowou			
SIGNE CCC	area A.	I. Lang TITLE	Dist. Prod. Su	erinte	ndent DATE Jan. 21, 1964			
(This space for Fed	eral or State office use)							
PERMIT NO.			APPROVAL DATE					
APPROVED BYCONDITIONS OF APPRO		TITLE _			DATE			

# 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.

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-685231

#### TENNERO OIL COMPANY DRILLING PROGNOSIS

LEASE: Hondo-Federal DISTRICT: Midland PROJECTED ID: 7800

WELL NO.: 1 FIELD: Wildcat

ESTIMATED HIEMATION: 3585

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LOCATION: 660' FS&ML Section 6, W-17-S, R-28-R. Eddy County, New Mexico

JAN 27 10-4

#### DRILLING, CASING, AND CEMENTING:

D. T. CFFICE

- 1) Drill 171 hole to approximately 400'.
- 2) Cement 13-3/8", 48# ft., H-40, ST&C Casing @400° with sufficient 50-50 Incor Posmix with 2% cacle to circulate. Hum ber type centralizers on shoe and next two collars above shoe. A regular guide shoe and insert float in lat collar above shoe can be used.
- 3) If float valve holds, WCC 8 hrs. and nipple up.
- 4) After WOC 12 hrs., pressure test casing with 800 psi and drill out. Do not use excessive RFM or weight until all drill collars are below the shoe.
- 5) Drill 121" hole to approximately 1850".
- 6) Run 8-5/8", 24# ft., J-55, STMC Casing at 1850'. Use bar type centralisers on guide shoe and next two collers above shoe. Use insert float in lat collar above shoe.
- 7) Cement with sufficient 50-50 Incor Posmix with 6% gel followed by 100 ax Incor with 2% gel to circulate to surface. All cement to contain 2% cacles Proceed cament with 2 sx lime missed in 10 bble. Fresh water.
- 8) If float holds, fend casing as comented, release pressure and nimple up. after WOC 12 hrs., pressure test 8-5/8" casing to 1000 psi for 30 min. and drill out cement. Do not exceed 20,000# weight on bit and 60 RFM until all drill collars are below shoe.
- 9) Drill 7-7/8" hole to approximately 7800". Fract TD will be determed by wellsite geologist.

  10) Run 4½" casing as follows:

  0' 100' 4½" 11.6#, J-55, ST&C Casing.

  100' 6000' 4½" 9.5#, J-55, ST&C Casing.

  6000' 7800' 4½" 11.6#, J-55, ST&C Casing.

  Casing will be run with guide shoe, differential fill-arcellar and suf-
- 10) Run 42" casing as follows:

100' - 6000' - 42" 9.5#, J-55, ST&C Casing.

6000' - 7800' - 42" 11.6#, J-55, ST&C Casing.

Casing will be run with guide shoe, differential fill appendiar and sufficient reciprocating samples. fleient reciprocating scratchers and centralizers to cover productive interval.

- 11) Cement with sufficient 50-50 Pozmix "S" cement to cover all zones of interest. Tail in with latex cement to cover perforating intervals. Use 2 ax lime in 10 bbls. water ahead of cement. Mix 2 ax Sodium Bichromate in mud system while circulating to run 12" casing.
- 12) If float holds, land casing as comented and nivole up. Run temperature survey after WOC 12 hrs.

#### DRILLING FLUIDS PROGRAM:

- 1) Surface Hole 0 to 400'. Spud mud and fresh water.
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  ARTEBIA, OFFICE 39

  edd ARTEBIA, OFFICE 2) Intermediate Hole - 400' to 1850'. Drill with clear water, add enough gel to clean hole good and get good samples. Use Dick's mud seal and filtre if any lost circulation is encountered.
- 3) Below Intermediate Hole 1850' to TD. Air, gas or fresh water may be used to drill from 1850' to 6700'. At 6700' have hole madded up with low solids mud, with 36-38 Viscosity, 20-25 CC water loss.

#### DRILLING TIME:

- 1) Ten foot drilling time from helly measurements will be kept by drilles from surface pipe to ID.
- 2) A four pen recorder will be furnished by the contractor. It should record rate of penitration, torque weight on bit, many press.

#### DRILL PIPE MEASUREMENTS:

1) Tally drill pipe at all casing points, coring points, logging points and approximately every 1000'.

#### DRILLING SAMPLES:

1) Two sets of 10' samples will be caught from surface to intermediate casing point and 6700' to T.D. A fine meah screen may have to be installed on shale shaker to catch the fine samples from the upper part of hole, if this is not satisfactory, a mud box may have to be installed in the mud line to insure catching satisfactory samples. Samples will be bashed, sacked, labeled in bundles of 100'.

Samples will be bashed,

Samples will b

#### DEVIATION:

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  SURVEY

  1) Deviation surveys shall be taken every 100' on surface hold EW from 400' to

  TD. Surveys may be taken every 500' or every train and of the surveys are trained to t TD. Surveys may be taken every 500' or every trip, Milichever occurs first.
- 2) Maximum deviation shall be allowed as follows:

0' - 400': 1° 3000' - 4000' - 4° 400' - 1800': 2° 4000' - 5000' - 5° 1800' - 3000': 3° 5000' - TD - 6°

3) Deviation should not change more than 120 in any 100' interval. If deviation change exceeds 130 per 100', a string resmer will be run to wipe out dog leg. If deviation change exceeds 20 per 1001, 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.

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#### DAILY DRILLING REPORT:

- 1) The AAODC drilling form shall be used.
- 2) This report shall be completely filled out except for crew hours. Tenneco copy should be mailed to Midland Office every two or three days.
- 3) Morning reports shall be made to the Midland District Office each week day morning between 8:00 and 8:30 A.M., CST.

#### DRILL STEM TESTING:

1) One possible DST in upper Wolfcamp. One definite DST in Lower Wolfcamp and/or Cisco. Additional testing through intermediate casing may be required.

#### CORING:

1) Two fifty foot cores in Lower Wolfcamp and/or Cisco.

#### LOGGING:

- 1) Gamma-Ray, Sonic an Laterolog from intermediate casing point to surface.
- 2) Dual-Induction Electric W/SP, Gama and Sonic logs from TD to intermediate casing. Detail on each log about 500'. Microlog of about 500' may be required.

#### APPROXIMATE FORMATION TOPS:

Yates	470'			
Queen	9801			
San Andres	18351			
Glorietta	3140'			
Tubb	4540			
Abo	51301			
Wolfcamp	63301			
K <sub>l</sub> Marker	7335'			

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#### SECURITY STATUS:

- 1) Any information to be released by Termeco Exploration Department only.
- 2) An exploration wellsite geologist will be on location through all prospective zones.

APPROVED:

A. W. Lang

A. D. Hicks

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					THIS FORM				
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Operator		<del></del>		Lease				Vell	No.
TEACO VIEW	ECO OIL COM				HOHDO F	EDERAL			1
Unit Letter	Section	Township		Rea		County			
P Actual Footage Le	retion of Valle	17 sou	TH	28	EAST		ED	ĐΥ	j
660	foot from the	SOUTH	10.						
Ground Level Elev			line and	60	O fe	et from the	EAST	line	
3585 Est.		olfcamp		Pool Wild	last.			Dedicated /	creage:
								40	Acres
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