Form 3160-3
(July 1989)
(formerly 9-331C)

CONTACT REC NG OFFICE FOR NU R OF COPIES REQU RED (Other instructions on reverse side)

BLM Roswell District
Modified Form No.
NM060-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-26692

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☐ DEEPEN ☐ PLUG BACK ☒

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ OTHER — SINGLE ZONE ☒ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME: Huber "17" Federal

2. NAME OF OPERATOR: Southland Royalty Company

3a. AREA CODE & PHONE NO.: 915-686-5600

9. WELL NO.: 2

3. ADDRESS OF OPERATOR: 21 Desta Dr., Midland, TX 79705

10. FIELD AND POOL, OR WILDCAT: West Corbin (Delaware)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FSL & 1980' FWL
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 17, T18S, R33E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 11 Miles southeast of Maljamar, NM.

12. COUNTY OR PARISH: Lea

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 320

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.: 1867'

19. PROPOSED DEPTH: 8965' (Plug Back)

20. ROTARY OR CABLE TOOLS: Originally drilled w/rotary

21. ELEVATIONS (Show Whether DF, RT, GR, ETC.): 3863.8' GR.

22. APPROX. DATE WORK WILL START*: 15 September 1990

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5	J-55	STC	653'	400 sx-Circ.
12-1/4"	8-5/8"	24	K-55	STC	2925'	1800 sx-Circ.
7-7/8"	5-1/2"	15.5 & 17	N80, J55, K55	STC	11,450'	2500 sx

The proposed workover procedure and well bore diagrams (current and proposed) are attached.

RECEIVED
AUG 31 11 33 AM '90

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 Robert L. Bradshaw TITLE Sr. Staff Env./Reg. Spec. DATE 31 August 1990

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY Orig. Signed by Adam Salamon TITLE PETROLEUM ENGINEER DATE 9-6-90

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

TITLE 18 U.S.C. SECTION 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

N MEXICO OIL CONSERVATION COMMISS

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective [illegible]

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
SOUTHLAND ROYALTY COMPANY	HUBER 17 FEDERAL	2

Unit Letter	Section	Township	Range	County
K	17	18 SOUTH	33 EAST	LEA

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

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3863.8'	DELAWARE	WEST CORBIN	40 Acres

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

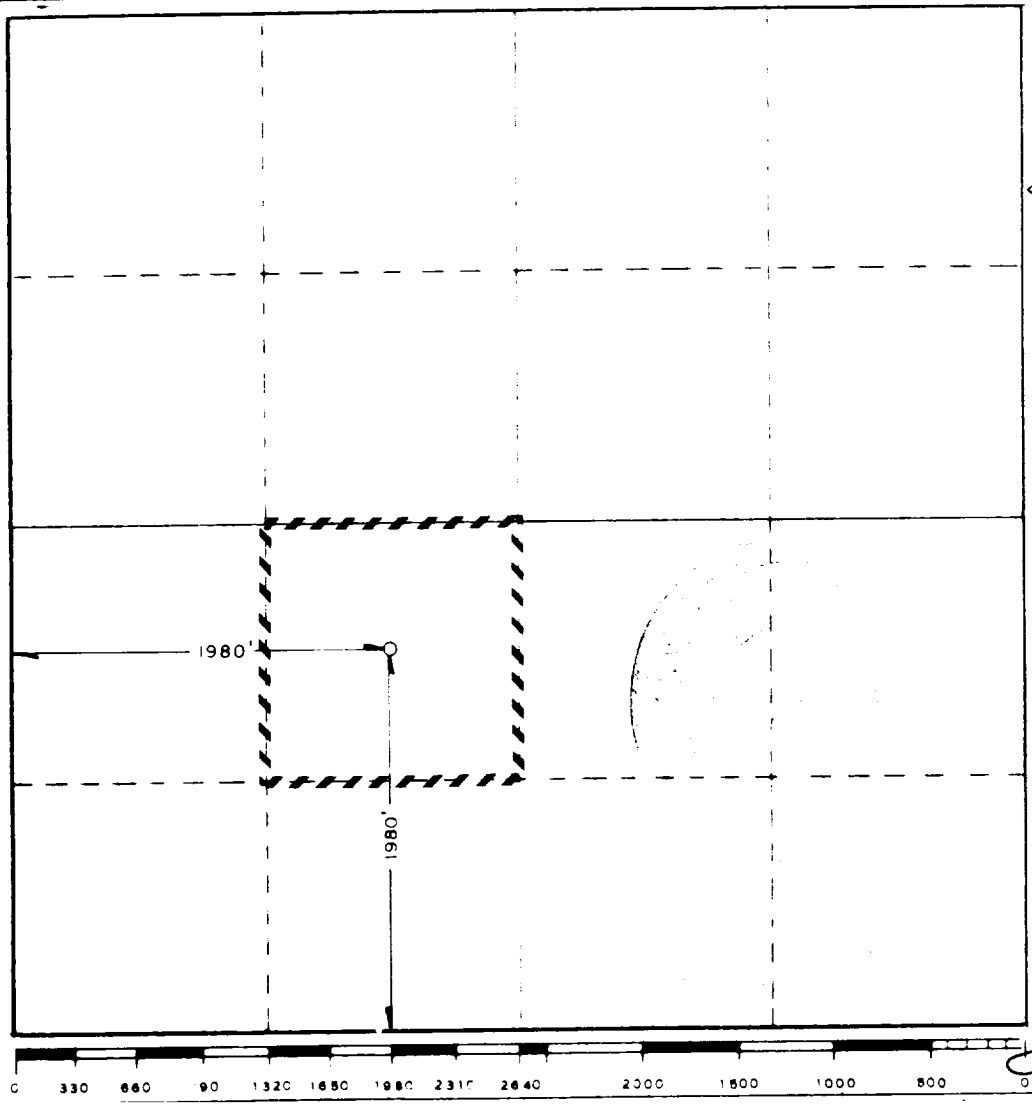
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Robert L. Bradshaw

Name: Robert L. Bradshaw

Position: Sr. Staff Env./Reg. Spec.

Company: Meridian Oil Inc.

Date: 31 August 1990

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: JANUARY 22, 1986

Registered Professional Engineer and/or Land Surveyor

John W West

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

96560

Huber 17 Federal #2
South Corbin (Wolfcamp) Field
Lea County, New Mexico

Workover Procedure

1. MIRU pulling unit. ND pumping tee. POOH with rod string and pump. Kill well with treated 2% KCl water. NU BOP. Release TAC and POOH with 2 7/8" production tubing.

2. RU electric line. RU packoff head on top of BOP. RIH with 5 1/2" CIBP and set at 9000'. POOH.

3. RU 3 1/2" x 40' dump bailer. RIH and dump bail 35' of cement on top of CIBP. POOH. Test casing to 1500 psi.

4. RU GR/CBL/CCL tool. RIH and log from 6000' to 4000' with 1500 psi being held on casing. POOH. Contact production engineer and discuss cement bond prior to perforating.

5. RU electric line to perforate. RIH with 4" casing guns and perforate the Delaware sand at:

Interval	Density	#Holes
5080'-5092'	2 spf	26
5140'-5150'	2 spf	22
5190'-5200'	2 spf	22
5209'-5220'	2 spf	24
Total		94

POOH and RD electric line.

6. RIH with 5 1/2" treating packer, 2.25" SN, and 2 7/8" tubing. Set packer below bottom perforation and test tubing to 3800 psi. Release packer. PU to 4980' and reset packer. NU stimulation valve.

7. MIRU stimulation company. RU surface lines and test to 4500 psi. Place 500 psi on 2 7/8" x 5 1/2" annulus. Monitor throughout the job. Pump 2200 gallons of 7 1/2% NEFe HCl acid. Space out 140 RCNBS (sp gr =1.3) throughout the job. Displace acid to bottom perforation with treated 2% KCl water. If ballout occurs, surge balls off perfs and continue displacement.

Treating Rate	=	4-5 bpm
Anticipated Treating Pressure	=	2000 psi
Maximum Treating Pressure	=	3800 psi

RDMO stimulation company.

8. Swab test well recording rates/volumes/cuts. If fluid entry is limited, continue with fracturing procedure.

9. ND stimulation valve. Release packer and RIH through perforations. POOH.

10. MIRU stimulation company. ND BOP. NU flanged frac valve. RU surface lines and test to 4500 psi. Fracture stimulate the Delaware sand perforations (5080'-5220', total 94 holes) according to the attached fracture stimulation.

Fracture Fluid Volume/Type	=	51000 gallons 35# Borate
Proppant	=	160,000 lbs 20/40 Ottawa sand
Treating Rate	=	25 bpm
Anticipated Treating Pressure	=	2000 psi
Maximum Treating Pressure	=	3800 psi

Flush stimulation to top perforation with treated 2% KCl water.

11. Shut well in to RD stimulation company and RU flowline. Leave well SI 2-3 hours. Flow well back on 8/64" choke to recover load water.

12. Kill well with treated 2% KCl water. ND frac valve. NU BOP. RIH with 4 3/4" bit and 2 7/8" tubing. Reverse out sand fill. POOH.

13. TIH with production tubing as follows:

- Bull plugged MA
- Perforated sub
- Mechanical SN (2.25" ID)
- 5 1/2 TAC
- ±5000' of 2 7/8" 6.5# N-80 tubing

Set TAC with SN above perfs. ND BOP. NU pump tee. TIH with following rod string:

- 2 1/2" x 1 1/4" x 24' RHBM pump
- 3475' of 3/4" grade "D" steel sucker rods with FHSMC
- 1525' of 7/8" grade "D" steel sucker rods with FHSMC

NOTE: Verify rod design with actual test data prior to installation.

Hang rods on beam. Report production volumes to Midland office. Sheave unit as required to keep well pumped off if possible.

HUBER 17 FEDERAL #2
WEST CORBIN (DELAWARE) FIELD
LEA COUNTY, NEW MEXICO
PROPOSED SCHEMATIC