N.M. OIL CONS. COMMISSION
P.O. BOX 1980
HOBBS, NEW MEXICO 88240

Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

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

2. NAME OF OPERATOR: Xeric Oil & Gas Corporation

3. ADDRESS AND TELEPHONE NO.: P.O. Box 352, Midland, TX 79702 (915) 683-3171

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1330' FSL & 1330' FEL Standard ~~UNORTHODOX~~ LOCATION; Unit J
At proposed prod. zone: 1330' FSL & 1330' FEL

Subject to Like Approval By State

5. LEASE DESIGNATION AND SERIAL NO.: LC - 060881

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT AGREEMENT NAME: Unit# 14-08-0001-8917

8. FARM OR LEASE NAME, WELL NO.: South Pearl Queen Unit #28

9. API WELL NO.: New

10. FIELD AND POOL, OR WILDCAT: Pearl Queen

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 4, T20S, R35E

12. COUNTY OR PARISH: Lea

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 22 miles southwest of Hobbs, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1330'

16. NO. OF ACRES IN LEASE: 240

17. NO. OF ACRES ASSIGNED TO THIS WELL: ~~20~~ 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 660'

19. PROPOSED DEPTH: ~~4600~~ 5300'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3681' GR

22. APPROX. DATE WORK WILL START*: 9/1/96

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4 "	8 5/8"-J55	24#	600'	335 sx- class c CIRCULATE
7 7/8"	5 1/2"-J55	15.50 #	~~4500~~ 5300'	955 sx- class c - SEE STIPS.

1) Spud 12 1/4" hole and drill to 600' or good casing seat
2) Run 8 5/8" csg to 600', 24# - J55 LT&C - Cement w/ 145 sx lead class c + 4% gel + 190 sx class c + 2% Cacl2 - circulate cement to surface
3) WOC 12 hrs, NU BOP and test to 1000 psi, install H2S Eqpt.
4) Drill 7 7/8" hole to approximate TD of ~~4500~~ 5300' w/ brine water
5) Run 5 1/2" -15.50#, J-55, LT&C csg to ~~4500~~ 5300'. Cement w/ 735 sx pacesetter lite cement for lead and tail w/ 220 sx class c. TOC estimated @ 600'
6) RDMO drilling rig

OPER. OGRID NO. 25482
PROPERTY NO. 15434
POOL CODE 49780
EFF. DATE 9/12/96
API NO. 30-025-33573

Subject to General Requirements and Special Stipulations Attached

RECEIVED
JUL 24 11 06 AM '96
CARLSBAD, NEW MEXICO

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Michael D. Mooney TITLE Consulting Engineer DATE 7/19/96

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Timothy P. O'Brien

APPROVED BY _____ TITLE Acting Area Manager DATE SEP 3 1996

*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

JUL 11 REC'D

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-33573	49780	Pearl Queen

[4] Property Code	[5] Property Name	[6] Well Number
15434	SOUTH PEARL QUEEN UNIT	28

[7] OGRID No.	[8] Operator Name	[9] Elevation
25482	XERIC OIL & GAS CORPORATION	3681.

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	4	20-S	35-E		1330	SOUTH	1330	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
~~20~~ 40	I		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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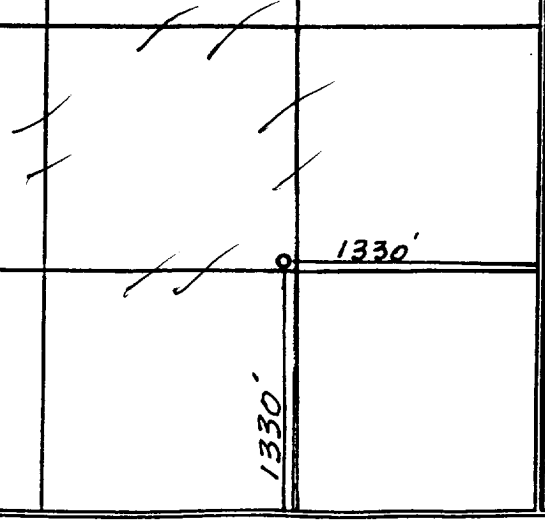


[17] OPERATOR CERTIFICATION

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

Signature

Michael G. Mooney
Printed Name

Consulting Engineer
Title

7/19/96
Date

[18] SURVEYOR CERTIFICATION

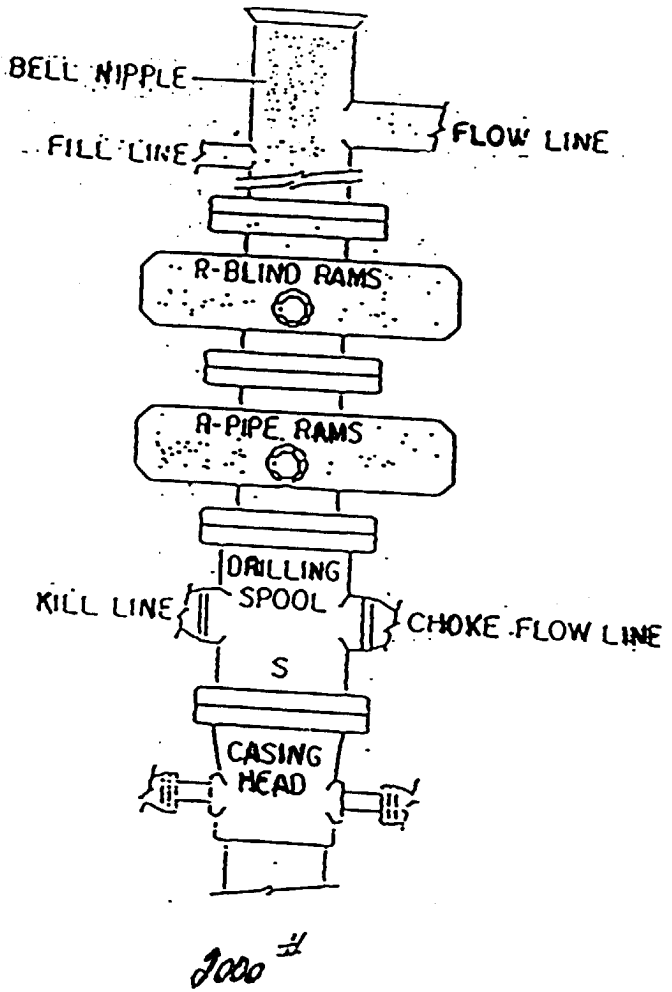
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

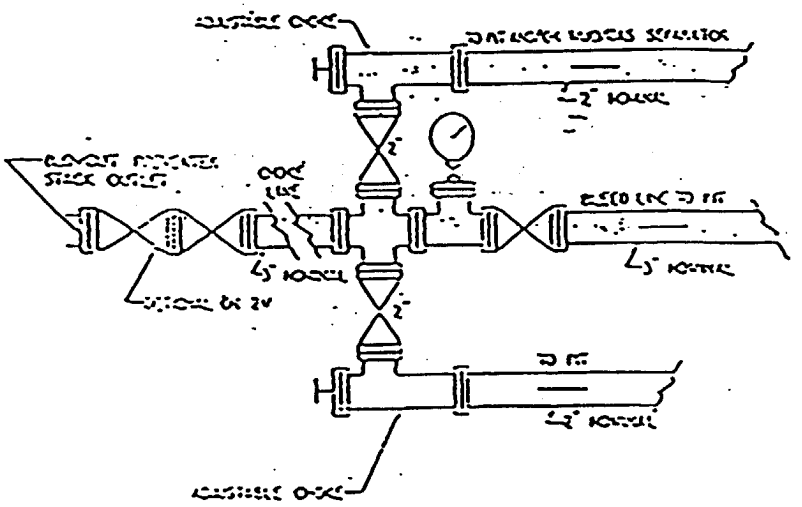
APRIL 16, 1995
Date of Survey

Signature and Seal of Professional Surveyor:

DAWN R. REDDY
NEW MEXICO
5412
REGISTERED PROFESSIONAL ENGINEER
LAND SURVEYOR

Certificate Number NM PE&PS NO. 5412





PROPOSED BOP' CONFIGUREMENT

PROPOSED MUD PROGRAM

CASING DESIGN

8 5/8" Surface Casing at 600'

7 7/8" Open Hole to 5,300'

RECOMMENDED MUD PROPERTIES

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	MUD TYPE
Spud	8.6 - 8.7	32 - 34	No Control	FRESH WATER
600'	8.8 - 9.0	32 - 34	No Control	FRESH WATER

Set 8 5/8" Surface Casing at 600'. Drill out with Brine water

700'	9.8 - 10.0	28 - 30	No Control
3,500'	9.8 - 10.0	34 - 36	No Control
4,500'	10.1 - 10.3	34 - 36	<10
5,300'	10.1 - 10.3	36 - 45	<8

RECOMMENDED MUD PROGRAM BY CASING INTERVAL

Surface Hole 0 - 600' (FRESH WATER)

Spud with a Horizon Gel/Lime slurry, mixing one Lime per ten Gel for a 32-34 viscosity. This fluid should be sufficient to clean the shallow, poorly-consolidated surface formations. If lost circulation occurs and cannot be regained with one LCM pill, we recommend blind drilling to total depth.

Allow hole conditions to dictate the need for any additional viscosity or hole sweeps at total depth to clean the hole and insure smooth properties for casing running operations.

OPEN HOLE (600' - 5300')

Drill out from under the surface casing with brine water circulating through the reserve pit to once again, minimize solids build-up. A flocculant (MF-1) can be used to aid in dropping solids, providing a clear fluid and maximum penetration rates.

While always possible, lost circulation does not appear to be a problem in this immediate area. Seepage should be able to be controlled with Paper. Should a complete loss of returns occur while drilling, we recommend following the same procedure described in the previous section.

We recommend maintaining a 9.0 - 9.5 ph with Caustic.

Attention should also be paid to the possibility of crooked hole in this area.

Clear water should be sufficient to drill to a depth of approximately 4,000'. At this point, we recommend returning to the working pits and mudding up by 4,500' with a Starch / Gel System to achieve the following properties:

Mud Weight	10.1 - 10.2
Viscosity	34 - 36
Fluid Loss	<10

The addition of MF - 55 will provide a low-solids fluid for maximum penetration rates and minimize formation damage.

We recommend using MF - 55 surfactant as a mud additive to provide the following benefits:

1. Minimize the usage of mud products.

2. Help drop solids providing a cleaner mud, lower mud weight, and a thinner filter cake.

3. Improve clean-up of the pay zone should whole mud losses be encountered.

After mud-up we recommend using a fibrous-type LCM to control seepage and following the same procedure described earlier for total loss.

At 5,300' we recommend reducing the water loss <8.

This fluid, adjusted as shown in the "Recommended Mud Properties" section, or as hole conditions dictate, should provide good hole conditions for any testing, logging, and casing operations.

DRILLING, CASING, AND CEMENTING PROGRAM

1) Drill 12 1/4" hole to approximately 600' or to firm formation with fresh water mud, and a viscosity of 32 - 34 SPQ. No Lost Circulation is expected There will be no water loss control.

2) Run 8 5/8" casing with a centralizer on the first collar and one every other collar from the bottom. Use a Texas patterned guide shoe with an aluminum baffle float. Land the casing with the collar 16" below the surface.

3) Cement the 8 5/8" casing with 145 sacks Class "C" + 4% Gel + 2% CaCl (2) + 1/4 #/sacks Cello Seal + 190 sacks Class "C" + 2% CaCl(2) If well does not circulate run 1" and cement with 10 sack stages of Class "C" + 3% CaCl (2) every 2 - 4 hours. If no progress is made after 3 attempts then drop 10 yard of pea gravel and continue staging, repeating the process until cement is circulated.

4) Wait on cement 12 hours before drilling out.

5) Drill 7 7/8" hole to approximately 5300' or to firm formation with Brine water mud, and a viscosity between 34 - 36 SPQ. There will be no water loss control until mud -up at 4500'. The viscosity will increase at TD to 45 SPQ for open hole logging

6) Run 5 1/2" casing with centralizers on the first collar and every third collar from bottom. Use a Texas Pattern guide shoe with an insert float. The bottom 300' of casing will be rough-coated to insure proper cement bonding.

7) Cement 5 1/2" casing with 735 sacks Pacesetter Lite Class "C" + 6% gel + 5 #/sacks salt + 1/4 #/sacks Celloseal then tail in with 220 sacks class "C" + 2% CaCl (2). TOC is estimated @ 600'.