

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN PLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-61360
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Robert E. Landreth		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR 505 North Big Spring, Suite 507, Midland, Texas 79701		8. FARM OR LEASE NAME Engle "20" Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 760' FNL & 760' FWL of Section 20, T-22S, R-34E At proposed prod. zone		9. WELL NO. 1
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 22 miles West south west of Eunice, New Mexico		10. FIELD AND POOL, OR WILDCAT Wildcat (Yates)
10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 760'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 20, T-22S, R-34E
16. NO. OF ACRES IN LEASE 160		12. COUNTY OR PARISH Lea County
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1 st well 4000'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3469' Ground Level		22. APPROX. DATE WORK WILL START* June 27, 1995

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	350'	400sx CIRCULATE
7 7/8"	5 1/2"	15.5#	4000'	750sx CIRCULATE

AFTER SETTING PRODUCTION CASING, PAY ZONE WILL BE PERFORATED  
AND STIMULATED AS NECESSARY.

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA

BOP SKETCH

SURFACE USE AND OPERATIONS PLAN

OPER. OGRID NO. 25527

PROPERTY NO. 17261

POOL CODE 96632

EFF. DATE 6/30/95

API NO. 1-125-33669

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 James M. C. Rulifson TITLE Agent DATE 6/9/95  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE Agent DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

DISTRICT II  
P.O. Drawer DB, Artesia, NM 88210

OIL CONSERVATION DIVISION

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

DISTRICT IV  
PO BOX 2088, SANTA FE, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 36-125-33664	Pool Code 96632	Pool Name WILDCAT (YATES)
Property Code 17201	Property Name ENGLE "20" FEDERAL	Well Number 1
OGRID No. 25527	Operator Name ROBERT E. LANDRETH	Elevation 3469

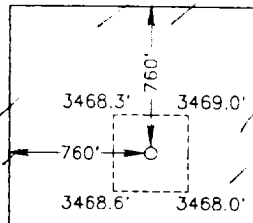
Surface Location

UL or lot No D	Section 20	Township 22 S	Range 34 E	Lot Idn	Feet from the 760	North/South line NORTH	Feet from the 760	East/West line WEST	County LEA
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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
Dedicated Acres 46	Joint or Infill	Consolidation Code	Order No.						

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

					<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature <u>James M.C. Ritchie, Jr.</u> Printed Name <u>JAMES M.C. Ritchie, Jr.</u> Title <u>AGENT</u> Date <u>JUNE 9, 1995</u>				
					<b>SURVEYOR CERTIFICATION</b>  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.  Date Surveyed <u>MAX 31 1995</u> Signature <u>J. EIDSON</u> SJA Professional Surveyor Certified Professional Surveyor Num. <u>95-1430859</u> 6-05-95 Certified Professional Surveyor J. EIDSON 676 3239 12641				

## SUPPLEMENTAL DRILLING DATA

ROBERT E. LANDRETH  
Engle "20" Federal Well No. 1

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Yates 3700'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONE:

Yates Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

<u>CASING SIZE</u>	<u>SETTING DEPTH</u>		<u>WEIGHT</u>	<u>GRADE</u>	<u>JOINT</u>
	<u>FROM</u>	<u>TO</u>			
8 5/8"	0	350'	24#	J-55	ST&C
5 1/2"	0	4000'	15.50#	J-55	ST&C

MINIMUM DESIGN FACTORS: Collapse 1.41 Burst 2.72 Tension 2.64

8 5/8" casing is to be set at approximately 350' in 12 1/4" hole. Casing is to be cemented with 200 sacks of Light cement tailed in with 200 sacks of Class "C", 1% CaCl. Cement to circulate.

5 1/2" casing is to be set at 4000' in 7 7/8" hole. Casing is to be cemented with 200 sx of Light cement followed by 550 sacks of Class "H" cement. Cement to tie back to 8 5/8" casing.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 12 1/4" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

Blowout prevention equipment, while drilling below the 8 5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 350 feet: Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

350 feet to 4000 feet: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. PH -9 to 10. Viscosity 32 to 36. Paper sweeps for hole cleaning. LCM may be used for seepage.

7. AUXILIARY EQUIPMENT:

A mudlogging trailer might be used while drilling through the Yates.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill Stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include GR-CNL- Density logs and GR-DLL logs.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

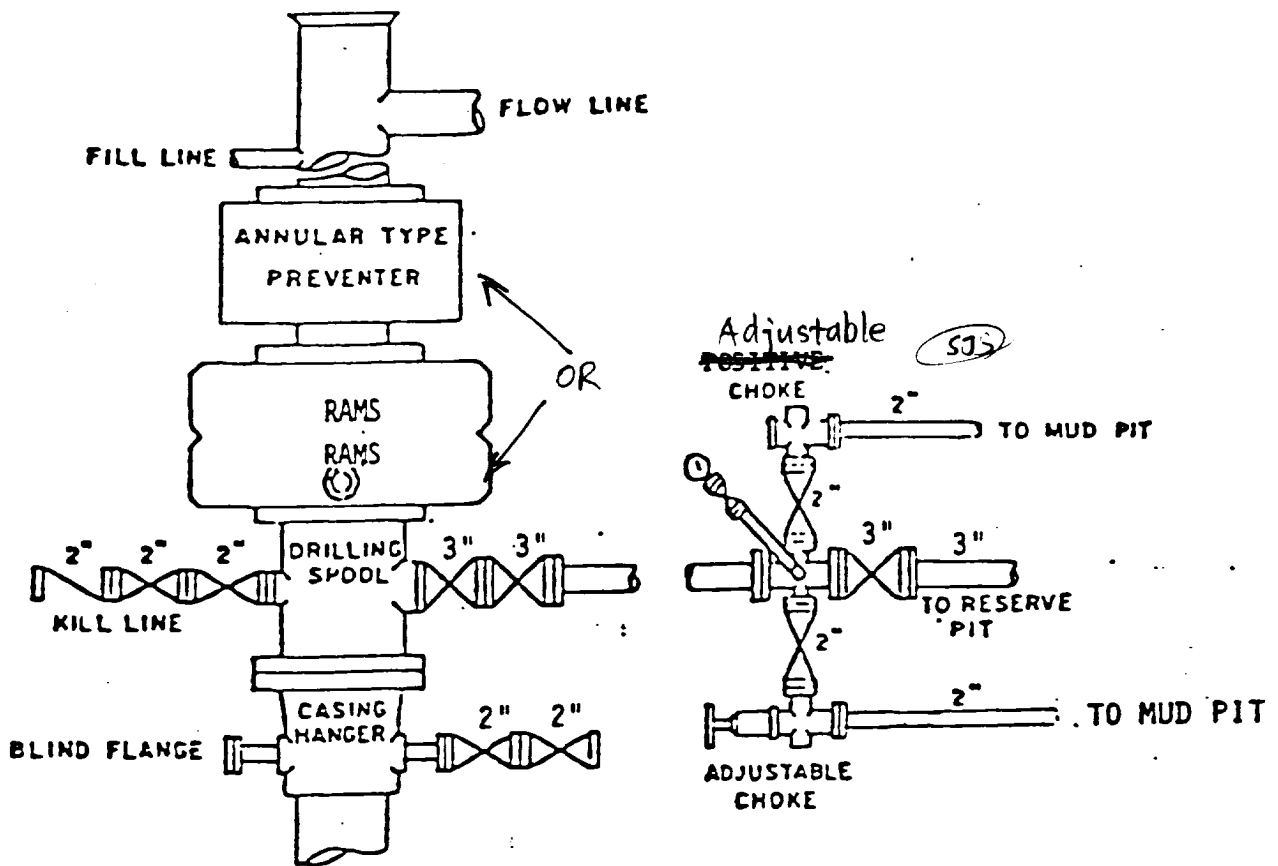
None anticipated.

Expected bottom hole pressure is approximately 1950 psi.

Expected bottom hole temperature is approximately 85 degrees Fahr

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT