

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

Yates Petroleum Corporation

3. ADDRESS OF OPERATOR

105 South Fourth Street, Artesia, New Mexico 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

Unit P; 560 FSL and 560 FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Forty miles NE of Loving, New Mexico

10. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

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

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

19. PROPOSED DEPTH

8500'

20. ROTARY OR CABLE TOOLS

Rotary

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

3647' GR

22. APPROX. DATE WORK WILL START\*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	1000'	Circulate - 800 sacks
11"	8 5/8"	32.0#	4500'	Circulate - 1450 sacks
7 7/8"	5 1/2"	17 & 20# 15.5#	TD	Tie back to 8 5/8" 900 sacks

Yates Petroleum Corporation proposes to drill and test the Delaware and intermediate formations. Approximately 1000' of surface casing will be set and cement circulated. Approximately 4500' of intermediate casing will be set and cement circulated. If commercial, production casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: Native Mud to 1000'; Brine to 4500'; cut Brine to TD.

BOP PROGRAM: BOP will be installed on the 13 3/8" casing and tested daily for operational.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
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

Chfta R. May

TITLE Permit Agent

DATE 5/21/93

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

15/ Kathy Lator

TITLE

Acty State Director

DATE

7-19-93

\*See Instructions On Reverse Side

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Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

## OIL CONSERVATION DIVISION

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

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

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

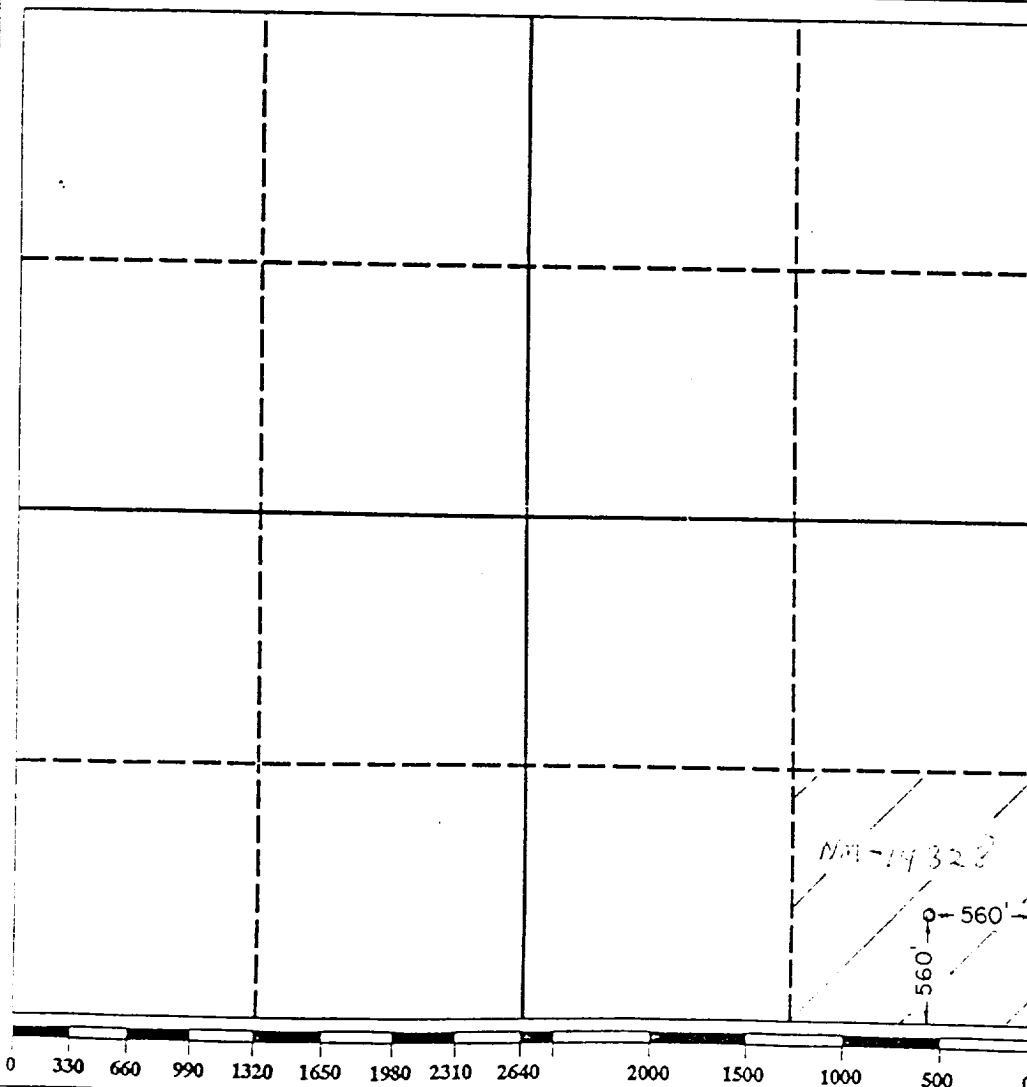
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

### WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>YATES PETROLEUM CORPORATION</b>			Lease <b>ANITA "ALD" FEDERAL</b>		Well No. <b>8</b>
Unit Letter <b>P</b>	Section <b>17</b>	Township <b>21 SOUTH</b>	Range <b>32 EAST</b>	County <b>NMPM LEA</b>	
Actual Footage Location of Well: <b>560</b> feet from the <b>south</b> line and <b>560</b> feet from the <b>EAST</b> line					
Ground level Elev. <b>3647</b>	Producing Formation <b>DELAWARE</b>		Pool <b>Lost Tank UNIT DEAT DELAWARE</b>	Dedicated Acreage: <b>40</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 interest 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 interest, has been approved by the Division.



#### OPERATOR CERTIFICATION

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

Signature  
*Clifton R. May*  
Printed Name:  
**Clifton R. May**  
Position  
**Permit Agent**  
Company  
**Yates Petroleum Corporation**  
Date  
**5/21/93**

#### 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 knowledge and belief.

Date Surveyed  
**4/13/93**  
Signature & Seal of Professional Surveyor  
*[Signature]*  
Certificate No.  
**3640**

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YATES PETROLEUM CORPORATION

Anita "ALD" Federal #8  
560' FSL and 560' FEL  
Section 17-T21S-R32E  
Lea County, New Mexico

1. The estimated tops of important geologic markers are as follows:

Rustler	956'
Top of Salt	1,332'
Bottom of Salt	3,157'
Bell Canyon	4,486'
Cherry Canyon	5,436'
Brushy Canyon	7,227'
Bone Spring	8,404'
TD	8,500'

2. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered:

Water: ~~Brushy~~ 150'

Oil or Gas: A Canyon 5436' and Bone Springs 8404'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3000#. BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

4. Auxiliary Equipment and Proposed Casing Program:

A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

B. Casing and Cementing Program:

Hole Size: 17 1/2"  
Setting Depth: 1000'

Total Depth: 1000'  
Mud Weight: 8.8 ppg

Casing Size: 13 3/8"

Casing Design:

<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
13 3/8	54.50#	J-55	8R	ST & C	0 - 1000'	1000'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

Cement Program: Lead Slurry: 500 sacks "Lite C" with 1/4# sack Cellocel, 2% Caclz2  
Slurry Properties: Weight: 12.4 ppg Yield 1.98 cu.ft./sack

Tail Slurry 250 sacks "Class C" with 2% Caclz2

Expected Linear Fill: Circulate to surface.

Slurry Properties: Weight: 14.8 ppg Yield 1.32 cu.ft./sack

Hole Size: 11"  
Setting Depth: 4500'

Total Depth: 4500'  
Mud Weight: 10.0 ppg

Casing Size: 8 5/8"

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Anita "ALD" Federal #8  
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Casing Design:

<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
8 5/8"	32#	J-55	8R	ST & C	0 - 4500'	4500'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

Cement Program: Lead Slurry: 1200 sacks "Lite C" with 10# sack salt, 5# Gilsonte  
Slurry Properties: Weight: 12.7 ppg Yield 1.98 cu.ft./sack

Tail Slurry 250 sacks "Class C" with 2% CaCl<sub>2</sub>

Calculated Linear Fill: Circulate to surface.

Slurry Properties: Weight: 14.8 ppg Yield 1.32 cu.ft/sack

Hole Size: 7 7/8"

Total Depth: 8500'

Casing Size: 5 1/2"

Setting Depth: 8500'

Mud Weight: 8.7 ppg

Casing Design:

<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
5 1/2"	17#	J-55	8R	LT & C	0 - 2050'	2050'
5 1/2"	15.50#	J-55	8R	LT & C	2050' - 7250'	5200'
5 1/2"	17#	J-55	8R	LT & C	7250' - 8500'	1250'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8

Cement Program: First Stage: 175 sacks "Class H" + 8# sack CSE + 0.6% CF-14 + 5# sack Gilsonte + 0.35% Thiflylite. DV Tool set at approximately 7400'.

Cement calculated to 7400'.

Slurry Properties Weight: 13.6 ppg Yield: 1.32 cu.ft/sack

2nd Stage: 425 sacks "Class C" with 10# sack CSE, 1/4# sack cellocel. Weight: 11.5 ppg, Yield 2.25 cu.ft/sack + 300 sacks- "H", 8# sack CSE, 0.5% CF-14 + 0.35% Thrifty lite. Weight 13.3 ppg, yield 1.82 cu.ft/sack.

Calculated to tie back to intermediate casing.

Slurry Properties: Weight: 13.6 ppg Yield: 1.75 cu.ft/sack

5. Mud Program and Auxiliary Equipment:

From 0 to 1000' (Minimum Properties)

Mud Weight: 9.1 ppg, Viscosity: 32 sec./1000 cc, Water Loss: N/C cc, Mud Type: FW Gel/LCM

Mud will be checked tourly by rig personnel. Sufficient quantities of mud will be kept on location to maintain minimum properties.

From 1000' to 4500' (Minimim Properties)

Mud Weight: 10.0 ppg, Viscosity: 28 sec./1000cc, Water Loss: N/C cc, Mud Type: Brine, use salt water gel for hole sweeps.

Mud will be checked tourly by rig personnel. Sufficient quantities of mud will be kept on location to maintain minimum properties

From 4500' to 8500' (Minimum Properties)

Mud Weight: 8.7 ppg, Viscosity: 28 sec.1000cc, Water Loss: N/C cc, Mud Type: Cut Brine.

Use salt water gel for hole sweeps.

Mud will be checked tourly by rig personnel. Sufficient quantities of mud will be kept on location to maintain minimum properties

6.. Testing, Logging and Coring Program:

Samples: Every 10' from surface casing to TD.

DST's: Any tests will be based on the recommendation of the well site Geologist as warranted by drilling breaks and shows.

Coring: None anticipated.

Logging: CNL-FCD from TD to casing, with GR-CNL up to surface; DLL from TD to casing.

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7. Abnormal Conditions, Bottom hole pressure and potential hazards:

Anticipated BHP:

From: <u>-0-</u>	TO <u>1000'</u>	Anticipated Max. BHP: <u>430</u> PSI
From: <u>1100'</u>	TO <u>4500'</u>	Anticipated Max. BHP: <u>1800</u> PSI
From: <u>3150'</u>	TO <u>8500'</u>	Anticipated Max. BHP: <u>3740</u> PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None.

H2S Zones Anticipated: None.

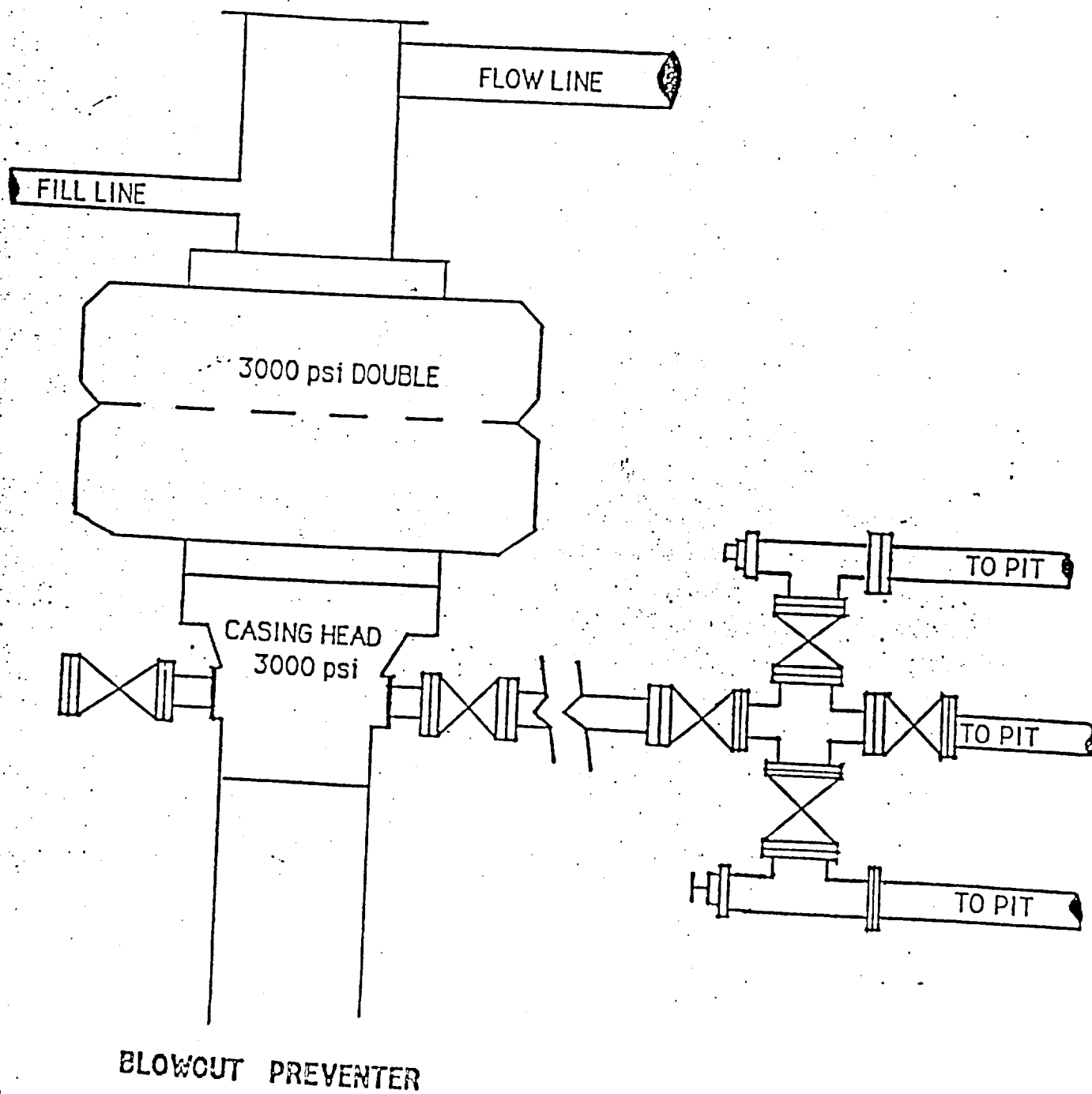
Maximum Bottom Hole Temperature: 125 F

8. Anticipated starting date: As soon as possible after approval with the drilling time being approximately 15 days and the completion time being another 15 days.

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