

OPER. OGRID NO. 25575PROPERTY NO. 18793POOL CODE 51683EFF. DATE 11/7/96API NO. 30-025-33675

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ROOM 10-15-96FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995UNITED STATES  
DEPARTMENT OF  
BUREAU OF LANDS

## APPLICATION FOR PERM

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

YATES PETROLEUM CORPORATION

## 3. ADDRESS AND TELEPHONE NO.

105 South Fourth, Artesia, NM 88210 505-748-1471

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

At surface

1650' FSL and 990' FWL, Unit L

At proposed prod. zone

Same

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

41 miles Northwest of Jal, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

## 16. NO. OF ACRES IN LEASE

479.25

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.

## 19. PROPOSED DEPTH

9200'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3749'

## 22. APPROX. DATE WORK WILL START\*

ASAP

## 23.

## PROPOSED CASING AND CEMENT

## CARLSBAD CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	11 3/4"	42#	1270'	750 sacks circ <b>WITNESS</b>
11"	8 5/8"	32#	4810'	1750 sacks (tie-back)
7 7/8"	5 1/2"	15.5# & 17#	TD	1050 sacks (tie-back)

Yates Petroleum Corporation proposes to drill and test the Delaware and intermediate formations. Approximately 1270' of surface casing will be set and cement circulated. Approximately 4810' 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: FW/Gel to 1270'; Brine to 4810', Cut Brine, Starch to TD.

BOPE PROGRAM: BOPE will be nipped up on the 11 3/4" 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, 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

*Clifton R. May*

TITLE

Regulatory Agent

DATE

10-10-96

(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:

APPROVED BY

(ORIG. SGD.) TONY L. FERGUSON

TITLE

ADM. MINERALS

DATE

11-4-96

\*See Instructions On Reverse Side

16						<b>17 OPERATOR CERTIFICATION</b>	
						I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
						Signature <i>Clifton R. May</i>	
						Clifton R. May	
						Printed Name Regulatory Agent	
						Title	
						Date 10-10-96	
						Date	
NM-81274 990'						<b>18 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.	
1650'						Date of Survey 10/04/96	
						Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: 3640	

**YATES PETROLEUM CORPORATION  
THYME "APY" FEDERAL #11  
1650' FSL AND 990' FWL  
SECTION 1-T23S-R32E  
LEA COUNTY, NEW MEXICO**

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

Rustler	1260'	Bone Spring	8800'
Top of Salt	1295'	TD	9200'
Bottom of Salt	4680'		
Delaware	4968'		
Cherry Canyon	5990'		

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

Water: 250-750'  
Oil or Gas: 8800'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/4" casing and rated for 3M 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 Preventor 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.

**Auxiliary Equipment:**

- A. Auxiliary Equipment: Kelly cock, pit level indicators, 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.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	11 3/4"	42#	J55	8R	ST&C	0-1270'	1270'
11"	8 5/8"	32#	J55	8R	ST&C	0-4200'	4200'
12 1/4"	8 5/8"	32#	HC80	8R	ST&C	4200-4810'	610'
7 7/8"	5 1/2"	17#	N80	8R	LT&C	0-2000'	2000'
7 7/8"	5 1/2"	17#	J55	8R	LT&C	2000-3000'	1000'
7 7/8"	5 1/2"	15.5#	J55	8R	LT&C	3000-7000'	4000'
7 7/8"	5 1/2"	17#	J55	8R	LT&C	7000-8500'	1500'
7 7/8"	5 1/2"	17#	N80	8R	LT&C	8500-9200'	700'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80

**B. CEMENTING PROGRAM:**

Surface casing: 550 sx. Pacesetter Lite "C" w/ 1/4# Cellocel & 3% CaCl<sub>2</sub> (wt. 12.4 ppg. Yield 1.84 ft<sup>3</sup>) + 250 sx. Class "C" w/ 2% CaCl<sub>2</sub>. (wt. 14.8 ppg., Yield 1.32 ft<sup>3</sup>) Cement calculated to circulate to surface.

Intermediate Casing: 1500 sx. Pacesetter Lite "C" w/ 1/4# Cellocel + 3% CaCl<sub>2</sub>. (wt. 14.8 ppg. Yield 1.32 ft<sup>3</sup>) + 250 sx. Class "C" w/2% CaCl<sub>2</sub>. (wt. 14.8 ppg. Yield 1.32 ft<sup>3</sup>) Cement calculated to circulate to surface.

Production Casing: 1st Stage: 250 sx. "H" w/8# sack CSE, + 0.6% CF-14 +5# sack Gilsonite (wt. 13.6 ppg Yield 1.75 ft<sup>3</sup>) Cement calculated to 8000' DV tool set at approx. 8000 ft.

2nd Stage: 650 sacks pacesetter lite "C" w/5# sack Gilsonite, 1/4# sack Cellocel, + 0.5% CF-14.(wt. 12.7 ppg Yield 1.84 ft<sup>3</sup>) + 150 sacks "H" w/0.5% Cf-14 (wt. 13.6 ppg Yield 1.78 ft<sup>3</sup>). Cement calculated to tie back to intermediate csng. 100'.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1270'	FWGEL	8.6 - 9.6	32-36	N/C
1270'-4810'	Brine	10.0-10.2	28	N/C
4810'-9200'	Cut brine, Starch	8.9 - 9.1	30	< 15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. EVALUATION PROGRAM:

Samples: Every 20' from surface to 4000', 10' from 4000' to TD.

Logging: CNL/LDT from TD to casing with GR-CNL up to surface; DLL w/RXO from TD to casing; CMR over slected intervals

Coring: None anticipated

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

**THYME "APY" FEDERAL #11**  
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7. Abnormal Conditions, Bottom hole pressure and potential hazards:  
Anticipated BHP:
- |            |          |                            |     |
|------------|----------|----------------------------|-----|
| From: 0    | TO: 1270 | Anticipated Max. BHP: 250  | PSI |
| From: 1270 | TO: 4810 | Anticipated Max. BHP: 2062 | PSI |
| From: 4810 | TO: TD   | Anticipated Max. BHP: 3800 | PSI |

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None

H2S Zones Anticipated: None

Maximum Bottom Hole Temperature: 140F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 20 days.

## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**Yates Petroleum Corporation  
THYME "APY" FEDERAL #11  
1650' FSL AND 990' FWL  
SECTION 1-T23S-R32E  
LEA COUNTY, NEW MEXICO**

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

### **1. EXISTING ROADS:**

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 41 miles Northwest of Jal, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

#### **DIRECTIONS:**

Go east of Carlsbad on Hwy 285 to Hwy 31. Go east on Hwy 31 to Hwy 128 (Jal Hwy). Go approximately 17 miles to a major pipeline road. Turn left and go approx. 5.7 miles. Turn left (NW) and go approx. 1.4 miles and turn right. Go approx. 3.1 miles. Go approximately 1 mile east to Thyme #1 location. Turn right to the Thyme #2 location. New access will start here and go south, west, south, and west.

### **2. PLANNED ACCESS ROAD**

- A. The proposed new access will be approximately .085 of a mile in length from the point of origin to the southeast corner of the drilling pad. The road will go south 1400', then west 2400', then south 600', and west 50'.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on both sides. Two traffic turnout will be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

### **3. LOCATION OF EXISTING WELL**

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

## THYME "APY" FEDERAL #11

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### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.
- C. A 3" steel flowline will be laid on the surface following the access road to the tank battery on the #1 location.

### 5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

### 6. SOURCE OF CONSTRUCTION MATERIALS:

Federal pit located in the NE of Section 15-T23S-R32E

### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

### 8. ANCILLARY FACILITIES: NONE

### 9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.

10. PLANS FOR RESTORATION

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. SURFACE OWNERSHIP: Federal surface administered by BLM.

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE

A. Through A.P.D. Approval:

Clifton R. May, Regulatory Agent  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

B. Through Drilling Operations,  
Completions and Production:

Brian Collins, Operations Manager  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Yates Petroleum Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

10/10/96 Date

  
Regulatory Agent



FREIDA "AFR"  
FEDERAL

Saffron Unit

ON LEASE

**Yates Petroleum Corporation**  
105 SOUTH 4th STREET  
ARTESIA, NEW MEXICO 88210

AMANDA "AMN"  
FEDERAL

Thyme APY Fed. #11  
1650' FSL and 990' FWL  
Sec. 1-T.23S-R.32E  
Lea County, New Mexico

Drill Hole

STRATA TRASTE  
DRAW

Tie-in Point

Gravel  
Pit

Drill  
Hole

Gravel Pit

Oil  
Well

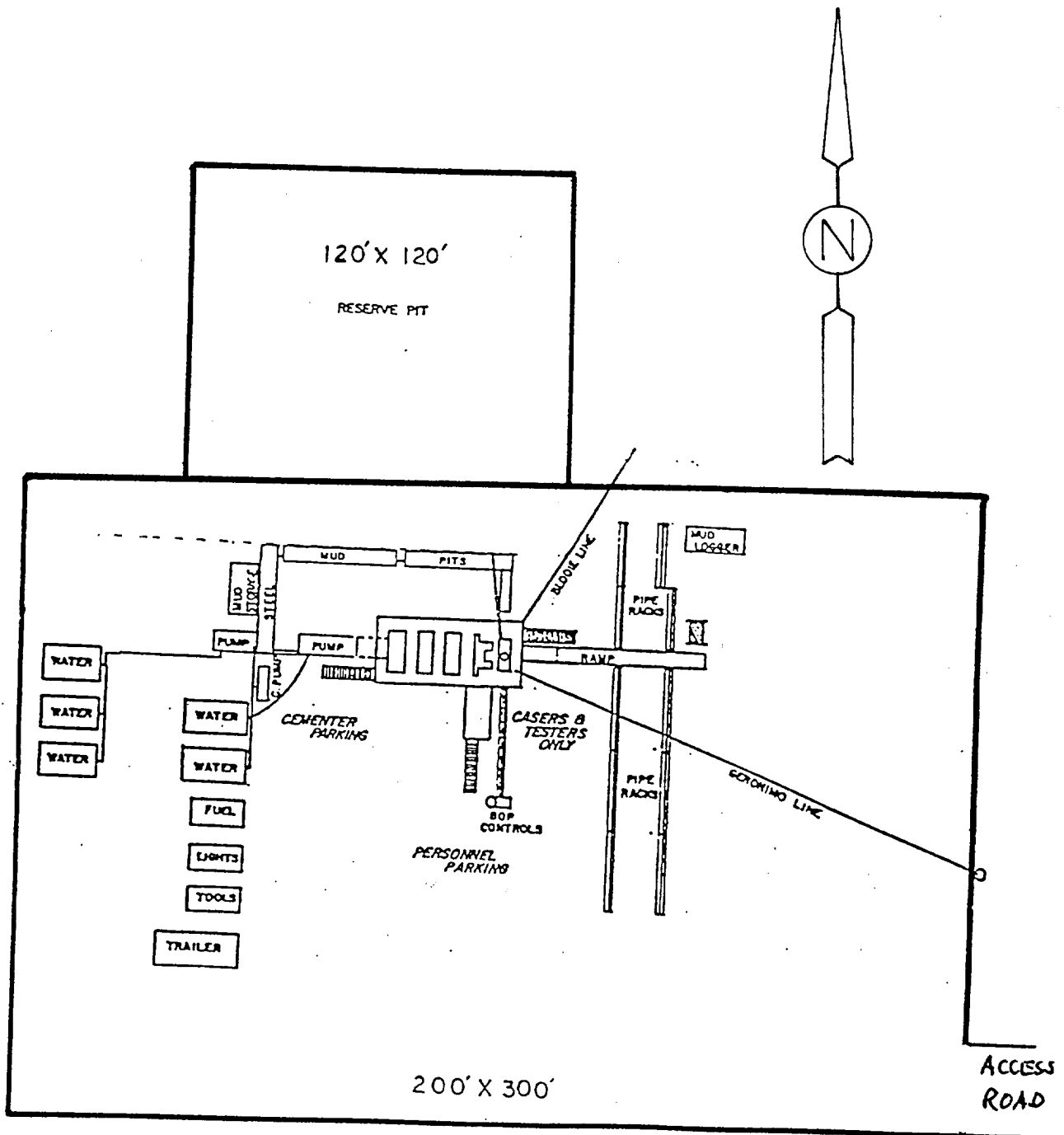
PIPELINE

OIL

CRUZ

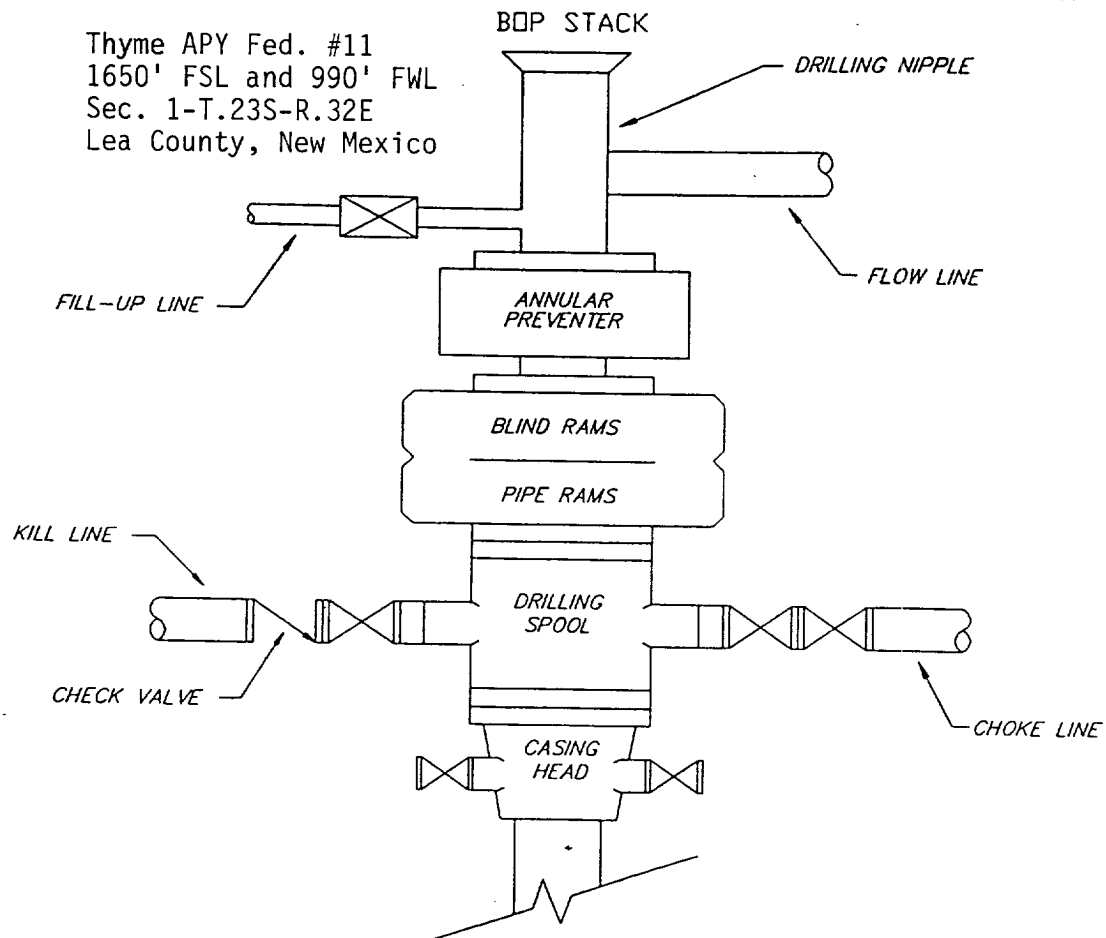
**Yates Petroleum Corporation**  
105 SOUTH 4th STREET  
ARTESIA, NEW MEXICO 88210

Thyme APY Fed. #11  
1650' FSL and 990' FWL  
Sec. 1-T.23S-R.32E  
Lea County, New Mexico

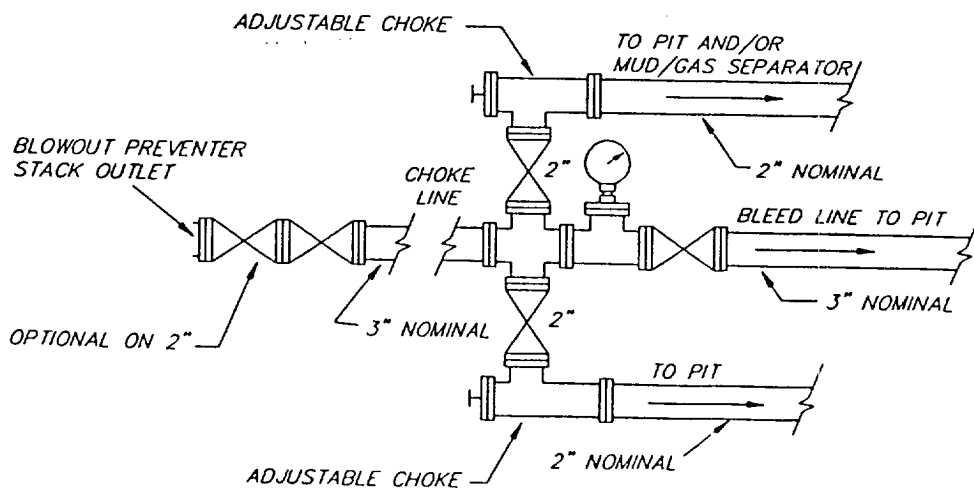


# YATES PETROLEUM CORPORATION

## TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER SCHEMATIC



## TYPICAL 3,000 p.s.i. CHOKE MANIFOLD SCHEMATIC



PROHIBITION FED UNIT  
MARALO (OPER.)

BOOTLEG RIDGE

Yates Petroleum Corporation  
105 SOUTH 4th STREET  
ARTESIA, NEW MEXICO 88210

Thyme APY Fed. #11  
1650' FSL and 990' FWL  
Sec. 1-T.23S-R.32E  
Lea County, New Mexico

PROHIBITION  
THYME FED.  
U.S.

DIAMOND