

UNITED STATES  
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: 1980' FNL and 660' FEL  
 At proposed prod. zone: same  
 RECEIVED SEP 24 1992  
 O. C. D. ARTESIA OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 34 miles northeast of Carlsbad, New Mexico

|   |      |                           |        |   |        |
|---|------|---------------------------|--------|---|--------|
| 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 | 611.88 | 17. NO. OF ACRES ASSIGNED TO THIS WELL    | 320    |
| 18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.         |      | 19. PROPOSED DEPTH        | 9750'  | 20. ROTARY OR CABLE TOOLS                 | Rotary |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>4268' GR  |      |                           |        | 22. APPROX. DATE WORK WILL START*<br>ASAP |        |

5. LEASE DESIGNATION AND SERIAL NO.  
 NM-69323  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 N/A  
 7. UNIT AGREEMENT NAME  
 Sedge Unit  
 8. FARM OR LEASE NAME  
 N/A  
 9. WELL NO.  
 1  
 10. FIELD AND POOL, OR WILDCAT  
 Wildcat Morrow  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 18-T22S-R23E  
 12. COUNTY OR PARISH  
 Eddy  
 13. STATE  
 NM

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#           | 325'          | 350 sx - <u>circulated</u>   |
| 12 1/4"      | 9 5/8"         | 36#             | 2350'         | 875 sx - <u>circulated</u>   |
| 8 3/4"       | 5 1/2"         | 17#             | TD            | tie back 600' above Wolfcamp |

See Drilling Plan attached for mud and cementing information.

Post ID-1  
10-2-92  
New loc & API

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 Ken Beardsley TITLE Landman DATE 8-25-92  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 9/23/92

APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS  
 ATTACHED

\*See Instructions On Reverse Side

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

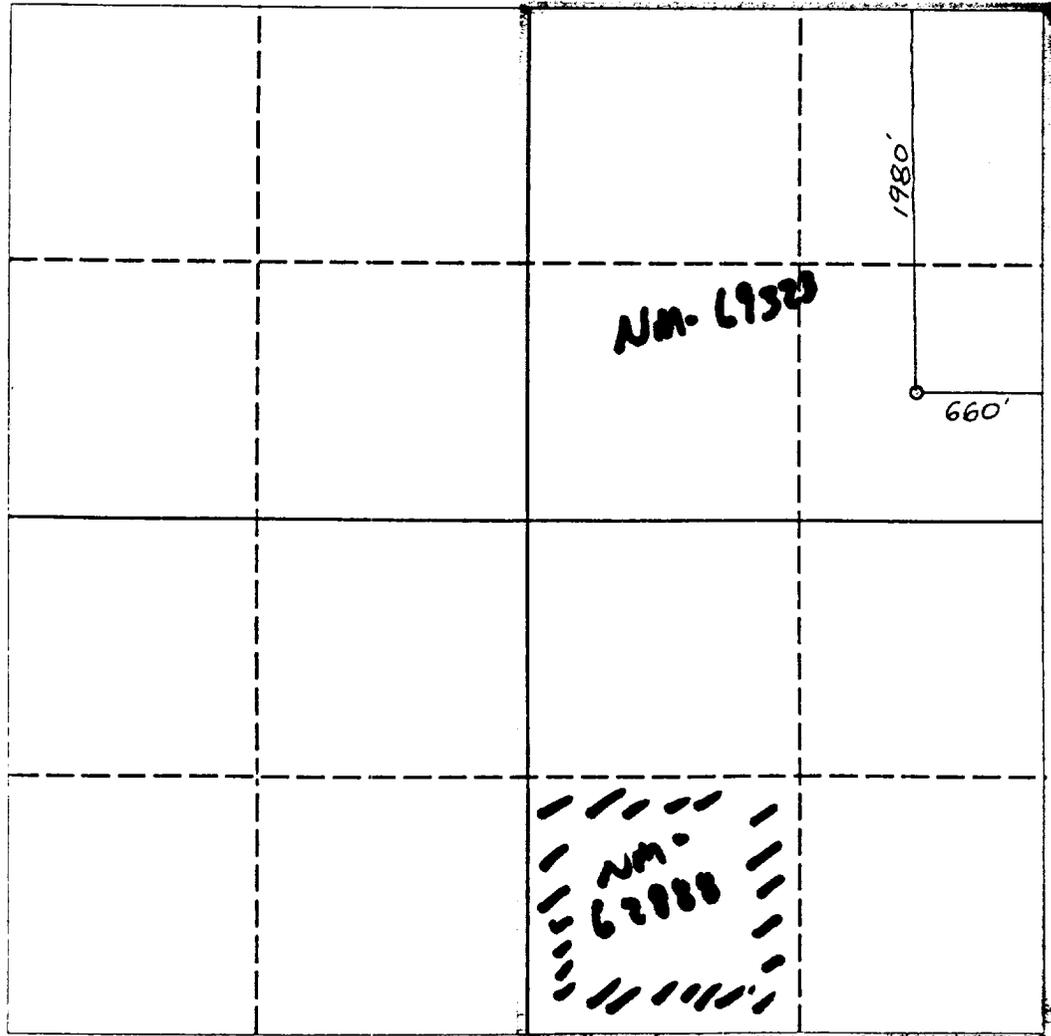
|   |                                      |                             |                           |                                  |  |  |  |  |
|---|--------------------------------------|-----------------------------|---------------------------|----------------------------------|--|--|--|--|
| Operator<br><b>YATES PETROLEUM CORPORATION</b>  |                                      |                             | Lease<br><b>SEGE UNIT</b> |                                  |  | Well No.<br><b>1</b>                   |  |  |
| Unit Letter<br><b>H</b>   | Section<br><b>18</b>                 | Township<br><b>22 SOUTH</b> | Range<br><b>23 EAST</b>   | County<br><b>EDDY COUNTY, NM</b> |  | NMPM                                   |  |  |
| Actual Footage Location of Well:<br><b>1980</b> feet from the <b>NORTH</b> line and <b>660</b> feet from the <b>EAST</b> line |                                      |                             |                           |                                  |  |  |  |  |
| Ground level Elev.<br><b>4268.</b>  | Producing Formation<br><b>Morrow</b> |                             |                           | Pool<br><b>Wildcat Morrow</b>    |  | Dedicated Acreage:<br><b>320</b> Acres |  |  |

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 Unit

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.

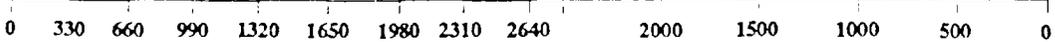
Signature: *Ken Beardemph*  
 Printed Name: **Ken Beardemph**  
 Position: **landman**  
 Company: **Yates Pet. Corp.**  
 Date: **8-24-92**

**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: **JULY 31, 1992**

Signature & Seal of Professional Surveyor: *[Signature]*

Professional Engineer Seal: **NEW MEXICO PROFESSIONAL ENGINEER**  
 Certificate No. **5412**  
 NM PEPS NOV 5412



Drilling Plan  
YATES PETROLEUM CORPORATION  
Sedge Unit #1  
1980' FNL and 660' FEL  
Section 18-T22S-R23E  
Eddy County, New Mexico

Anticipated Drilling Time 25 days.

Hole Size: 17 1/2" Depth To: 325' Casing Size: 13 3/8" Setting Depth: 325'

Casing Description: 13 3/8", 54.50#, 8R, J55, ST&C, New condition.

Cement Slurry: 350 sx "C" + ~~2%~~ CaCl<sub>2</sub> Yield 1.32 ft<sup>3</sup>, weight 14.8 ppg. Calculated to circulate to surface.

Casing Design Factors: Tensile strength 1.8+, collapse 1.125 +, burst 1.0+.

Hole size: 12 1/4" Depth To: 2350' Casing Size: 9 5/8" Setting Depth: 2350'

Casing Description: 9 5/8", 36#, 8R, J55, St&C, New condition.

Cement Slurry: 675 sx, "Lite C" w/1/2 # Cellocel, 10# Gilsonite, ~~39%~~ CaCl<sub>2</sub> (1242 ft.<sup>3</sup>) + 200 sx. "C" & 29 CaCl<sub>2</sub> (264 ft<sup>3</sup>) Calculated to circulate to surface.

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

Hole Size: 8 3/4" Depth to: 9750' Casing Size: 5 1/2" Setting Depth: 9750'

Casing Description: 0 -1800' 5 1/2", 17#, N80, 8R, LT&C, 1800-8600 17#, J55, 8R, LT&C, 8600'-9750', 5 1/2" 17#, N80, 8R, LT&C. All casing is new.

Minimum Design Factors: Tensile 1.80. Collapse 1.125. Burst 1.0.

Cement Slurry: Sufficient to cover uppermost producing horizon - estimated to be 6400.

Cement in one stage w/930 sx. "H" w/5# sack silica lite. 5# sack Gilsonite, 1/4 sack cellocel, .8% Fluid loss additive. Weight 15.1 ppg. Yield 1.34 ft<sup>3</sup>. Estimated Top of Cement 5800'.

**Anticipated Drilling Mud Program:**

From spud to 325' FW Gel/LCM for viscosity 34+ sec. 1000 cc. LCM For loss circulation problems. MW 8.6-9.5 WL-No control. Mud to be checked tourly by rig personnel. May encounter loss of circulation at any point in this interval. Sufficient quantities of mud on hand to maintain minimum properties listed.

From 325' to 2350' FW Gel/LCM Viscosity 30-36 sec. 1000 cc mud. MW 8.6-9.5 WL - No control. May encounter loss of circulation at any point in this interval. Mix LCM to regain returns. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on hand to maintain mud properties listed.

**Drilling Plan**  
**Sedge Unit #1**  
**Page 2**

From 2350' to 6000' Fresh water MW 8.4, viscosity 28cc. WL - No control. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on hand to maintain minimum properties listed.

From 6000' to 8400' Cut Brine MW 9.1 - 9.6 Viscosity 28cc. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on had to maintain minimum properties listed.

From 8400 to 9750' Cut Brine, Salt Water Gel, Starch. MW 9.1-9.6, viscosity 34-38 sec/1000cc mud. WL 10-15cc LCM for any loss of circulation. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on hand to maintain minimum properties listed.

Anticipated BHP:

|                   |    |             |                       |                 |
|-------------------|----|-------------|-----------------------|-----------------|
| From: <u>-0-</u>  | TO | <u>325</u>  | Anticipated Max. BHP: | <u>150</u> PSI  |
| From: <u>325</u>  | TO | <u>2350</u> | Anticipated Max. BHP: | <u>1025</u> PSI |
| From: <u>2350</u> | TO | <u>9750</u> | Anticipated Max. BHP: | <u>3550</u> PSI |

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: Spud - 365', 325' - 2350'.

H2S Zones Anticipated: Canyon estimated at 7443'.

Maximum Bottom Hole Temperature: 145° F

**YATES PETROLEUM CORPORATION**  
**Sedge Unit #1**  
**1980' FNL and 660' FEL**  
**Section 18-T22S-R23E**  
**Eddy County, New Mexico**

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Yates Petroleum Corporation submits the following ten items of pertinent information in accordance with BLM requirements.

1. The geological surface formation is Alluvium:
2. The estimated tops of geologic markers are as follows:

|                 |        |
|-----------------|--------|
| San Andres      | 520'   |
| Glorieta        | 2,038' |
| Yeso            | 2,158' |
| Bone Spring     | 2,965' |
| Wolfcamp        | 6,218' |
| Canyon          | 7,420' |
| Strawn          | 8,505' |
| Atoka           | 8,876' |
| Morrow          | 9,203' |
| Morrow Clastics | 9,253' |
| Lower Morrow    | 9,430' |
| TD              | 9,750' |
3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

|             |                       |
|-------------|-----------------------|
| Water:      |                       |
| Oil or Gas: | Canyon, Atoka, Morrow |
4. Proposed Casing Program: See Form 3160-3.
5. Pressure Control Equipment: See Form 3160-3 and Exhibit B.
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Kelly Cock; pit level indicators and flow sensor equipment; sub with full-opening valve on floor, drill pipe connections.
8. Testing, Logging and Coring Program:

Samples: 10' samples out from surface casing to total depth.

DST's: As warranted by drilling breaks and shows.

Coring: None.

Logging: CNL-LDT from TD to casing, with GR-CNL up to surface;  
DLL with minimum RxO from TD to casing.
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: As soon as possible after approval.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**Yates Petroleum Corporation**  
**Sedge Unit #1**  
**1980' FNL and 660' FEL**  
**Section 18-T22S-R23E**  
**Eddy 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 BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 34 miles northeast of Carlsbad, New Mexico, and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:**

Go on Highway 285 north of Carlsbad for approximately 10 miles north of Highway 137 or Queen Highway. Turn west on 137 for approximate 18 miles to 405. Turn west on 405 for approximately 2.4 miles to 404. Turn north on 404 for approximately 3.2 miles. New road starts here going west.

2. **PLANNED ACCESS ROAD**

- A. The proposed new access will be approximately 1000' in length from point of origin to the southeast edge of the drilling pad. The road will lie in a east to west direction.
- 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 one side. No traffic turnout will be built.

3. **LOCATION OF EXISTING WELL**

- A. There is no 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.

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

- A. There are no 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.

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:**

The dirt contractor will use the pit closest to the well location and make any arrangements with the owner of the pit at that time.

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:

- A. None required.

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. A cross section of a drill pad with approximate cuts, fills and pad orientation is shown on Exhibit E.
- 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 levelled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the BLM will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level within 90 days after abandonment.

11. SURFACE OWNERSHIP: BLM (Carlsbad, NM)

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:

Ken Beardemphl, Landman  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

B. Through Drilling Operations,  
Completions and Production:

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

14. CERTIFICATION:

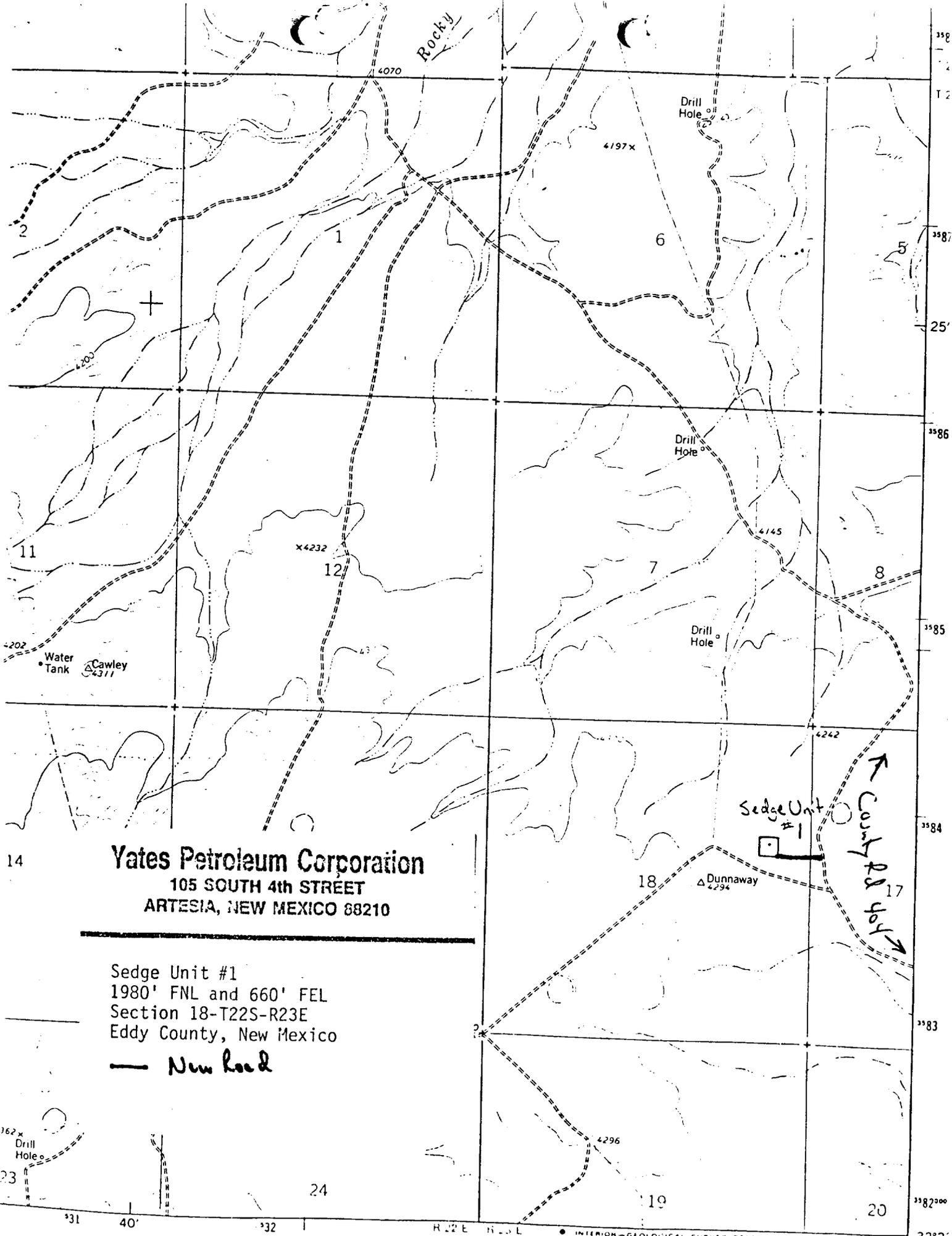
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and , that the work associated 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.

8-25-92

\_\_\_\_\_  
Date



\_\_\_\_\_  
Ken Beardemphl  
Landman

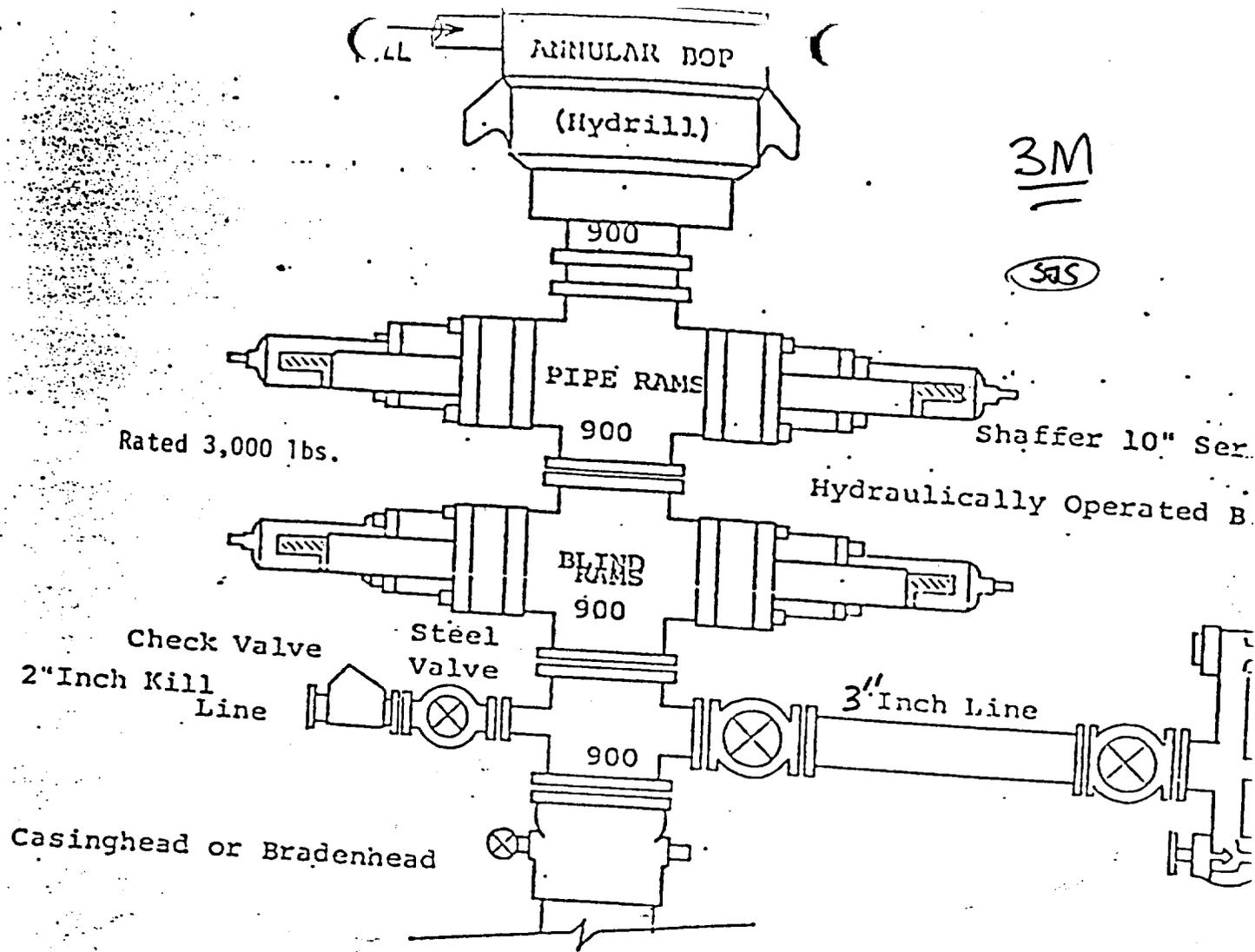


**Yates Petroleum Corporation**  
 105 SOUTH 4th STREET  
 ARTESIA, NEW MEXICO 88210

Sedge Unit #1  
 1980' FNL and 660' FEL  
 Section 18-T22S-R23E  
 Eddy County, New Mexico

— New Road

162x  
 Drill Hole



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. All preventers to be hydraulically operated with secondary manual installed prior to drilling out from under casing.
2. Choke outlet to be a minimum of 3" diameter.
3. Kill line to be of all steel construction of 2" minimum diameter.
4. All connections from operating manifolds to preventers to be all steel hole or tube a minimum of one inch in diameter.
5. The available closing pressure shall be at least 15% in excess of required with sufficient volume to operate the B.O.P.'s.
6. All connections to and from preventer to have a pressure rating equal to that of the B.O.P.'s.
7. Inside blowout preventer to be available on rig floor.
8. Operating controls located a safe distance from the rig floor.
9. Hole must be kept filled on trips below intermediate casing.

EXHIBIT  
B

# YATES PETROLEUM CORPORATION

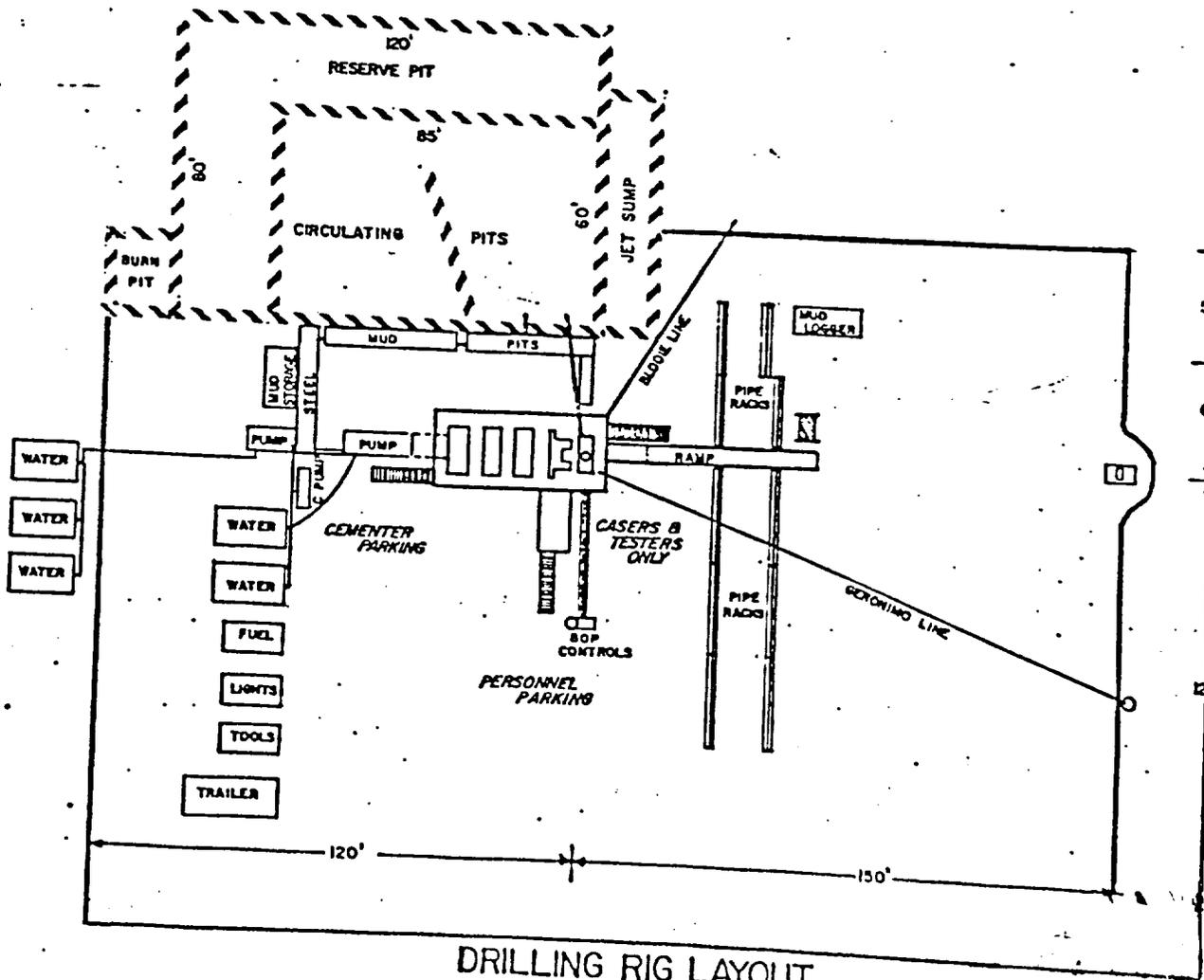


Exhibit C

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

Sedge Unit #1  
 1980' FNL and 660' FEL  
 Section 18-T22S-R23E  
 Eddy County, New Mexico

**Exhibit D**

