

N.M. Oil Cons. DIV-0143  
1301 W. Grand Avenue  
Artesia, NM 88210

Form 3160-3  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

AUG 03 2004

APPLICATION FOR PERMIT TO DRILL OR REENTER

0  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-16071</b>	
b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>Not Applicable</b>	
2. Name of Operator <b>Yates Petroleum Corporation</b>		7. If Unit or CA Agreement, Name and No. <b>Not Applicable</b>	
3A. Address <b>105 South Fourth Street Artesia, New Mexico 88210</b>		8. Lease Name and Well No. <b>Karen Federal #4</b>	
3b. Phone No. (include area code) <b>(505) 748-1471</b>		9. API Well No. <b>30-005-43695</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>1980' FNL and 660' FEL, Unit H</b> At proposed prod. Zone <b>same as above</b>		10. Field and Pool, or Exploratory <b>Wildcat Basement</b>	
14. Distance in miles and direction from nearest town or post office* <b>Approximately 4 miles east of Roswell, New Mexico</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>Section 26-T9S-R24E</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish <b>Chaves County</b>	13. State <b>NM</b>
16. No. of Acres in lease <b>1360</b>		17. Spacing Unit dedicated to this well <b>320</b>	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file <b>NM-2811</b>	
19. Proposed Depth <b>4835'</b>		21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3565' GL</b>	
22. Approximate date work will start* <b>ASAP</b>		23. Estimated duration <b>30 Days</b>	
24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |   |
|---|---|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan.   | 5. Operator certification.  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature <b>Clifton R. May</b>	Name (Printed/Typed) <b>Clifton R. May</b>	Date <b>5/3/02</b>
Title: <b>Regulatory Agent</b>		
Approved by (Signature) <b>/S/LARRY D. BRAY</b>	Name (Printed/Typed) <b>/S/LARRY D. BRAY</b>	Date <b>AUG 02 2004</b>
Title <b>Assistant Field Manager, Lands And Minerals</b>	Office <b>ROSWELL FIELD OFFICE</b>	<b>APPROVED FOR 1 YEAR</b>

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, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

Signature & Seal of  
Professional Surveyor

HERSCHEL L. JONES  
NEW MEXICO  
3640  
KAREN A.  
GENERAL SURVEYING COMPANY

Certified to No. Herschel L. Jones RLS 3640

**YATES PETROLEUM CORPORATION**

**Karen Federal #4**

1980' FNL and 660' FEL

Section 26-T9S-R24E

Chaves County, New Mexico

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

San Andres	445'	Wolfcamp	4135'
Glorieta	1085'	Penn	4475'
Yeso	1225'	Basement	4735'
Tubb	2660'	TD	4835'
Abo	3385'		

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

Water: 200'-300'  
Oil or Gas: 3550' to 4735'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000# 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, 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.

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>Coupling</u>	<u>Interval</u>	<u>Length</u>
12 1/4"	8 5/8"	24#	J-55	ST&C	0-900'	900'
7 7/8"	5 1/2"	15.5#	J-55	ST&C	0-4835'	4835'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
2. Yates Petroleum Corporation requests that a variance be granted in requiring the casing and BOPE to be tested to 2000 psi to testing the casing and BOPE to 1000 psi. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 1000 psi. We would have to go to the greater expense of hiring an independent service company to do the testing. Also, the bottom hole pressure in this field is proven to be near 2200 psi. A shut in surface pressure would be less than 1000 psi. We feel that a 1000 psi test will demonstrate that the BOPE is functioning properly, and in the unlikely event of a gas influx that the BOPE would be sufficient to control the well.

A. CEMENTING PROGRAM:

Surface Casing: Cement with 550 sx Lite "C" (YLD 2.0 WT 12.5). Tail in with 200 sx "C" + 2% CaCL2 (YLD 1.33 WT 14.8).

Production Casing: TOC 2800' Cement with 400 sx Pecos Valley Lite (YLD 1.42 WT 13.0).

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-900'	FW Gel/Paper/LCM	8.6-9.6	32-36	N/C
900'-3350'	Brine	10.0-10.2	28	N/C
3350'-TD'	Salt Gel/Starch	9.0-9.8	32-40	<6cc

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: 10' samples out from under surface casing.

Logging: Platform Express: CNL/LDT with NGT TD-to surface; GR/CNL to surface; DLL/MSFL TD - surface casing, BHC Sonic TD - surface casing.

Coring: None anticipated.

DST's: None anticipated.

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Anticipated BHP:

From: 0 TO: 900'  
From: 900' TO: TD

Anticipated Max. BHP: 400 PSI  
Anticipated Max. BHP: 2200 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 145 F

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 15 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
**Karen Federal #4**  
**1980' FNL and 660' FEL**  
**Section 26-T9S-R24E**  
**Chaves 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 well site is located approximately 4 miles east of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:**

Go to the intersection of Hwy 70-285 in Roswell, NM. Take Hwy 70 for approximately 4.1 miles to cattle guard on south side of the road. Turn south thru cattle guard to Karen Federal #1 pad. The new road will start here and go SW approximately 1800' to the SE corner of the pad.

**2. PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 1800' in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a southeasterly 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. 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 well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

**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.

**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:**

Dirt contractor will locate nearest pit and will obtain any permits and materials needed for construction.

**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 landfill. Burial on site is not approved

**8. ANCILLARY FACILITIES:** Yates wants the surface use plan to include a 3" O.D. steel pipeline to a tie-in point at the Karen Federal #1. The pipeline will follow the access road on the south side.

**9. WELLSITE LAYOUT:** Yates does not agree that this well should be drilled using steel pits as BLM has indicated.

- 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.
- D. Pits to the southwest.

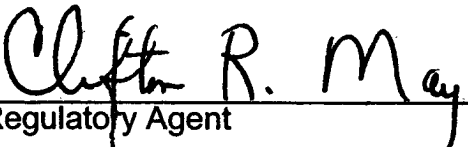
**10. PLANS FOR RESTORATION:**

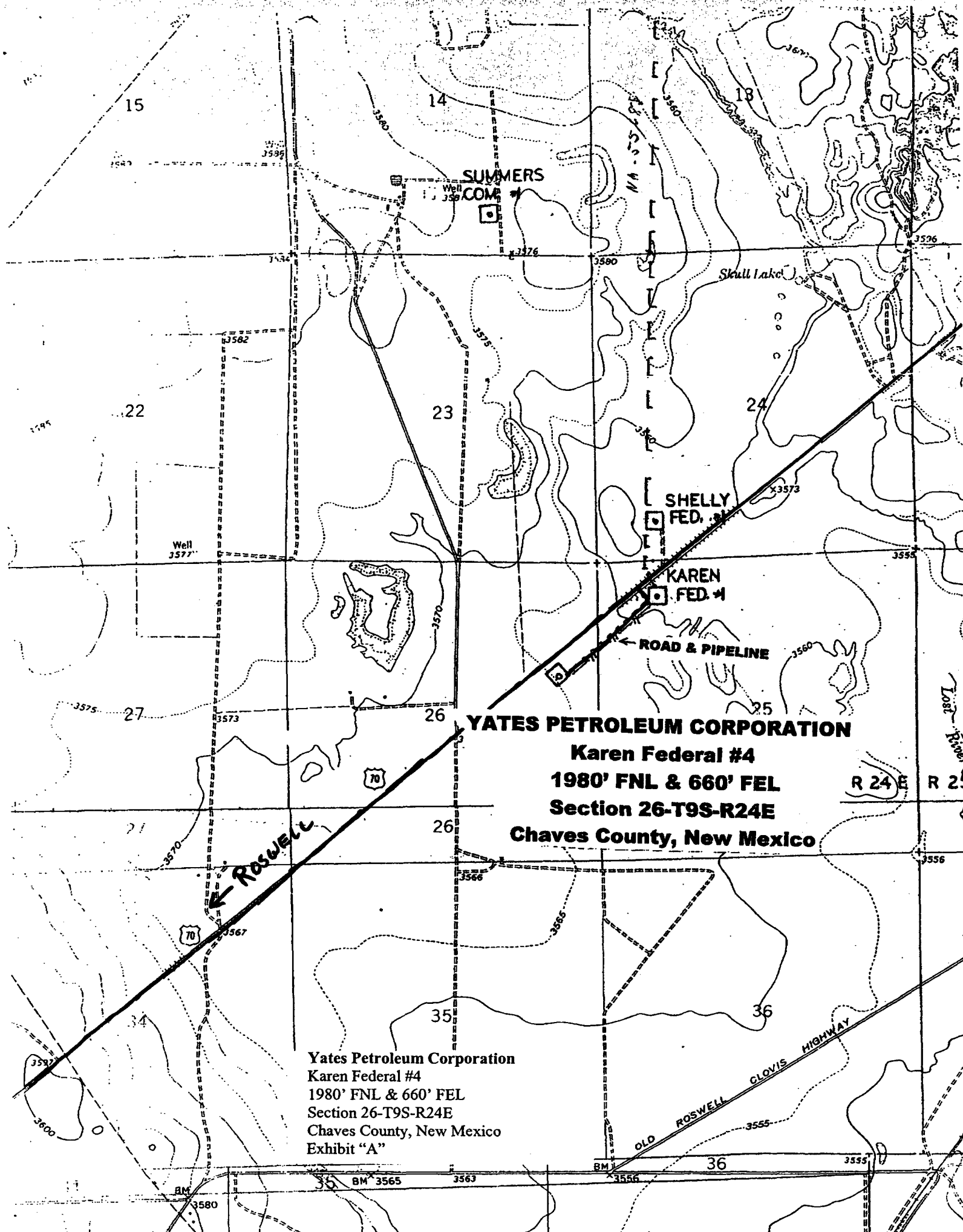
- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, 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 Bureau of Land Management, Roswell, NM
12. OTHER INFORMATION:
- A. Topography: Refer to the existing archaeological report, Number 427, done in March 2002, for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.
- B. The primary surface use is for the Roswell Gun Club.
13. OPERATOR'S REPRESENTATIVE:
- |  |   |
|--|---|
| A. Through A.P.D. Approval:<br>Clifton R. May, Regulatory Agent<br>Yates Petroleum Corporation<br>105 South Fourth Street<br>Artesia, New Mexico 88210<br>Phone (505) 748-1471 | B. Through Drilling, Completions & Prod.<br>Pinson McWhorter, Operations Manager<br>Yates Petroleum Corporation<br>105 South Fourth Street<br>Artesia, New Mexico 88210<br>Phone (505) 748-1471 |
|--|---|
14. CERTIFICATION:

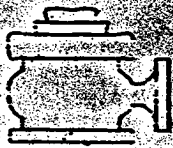
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated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

5/3/2002

  
Regulatory Agent



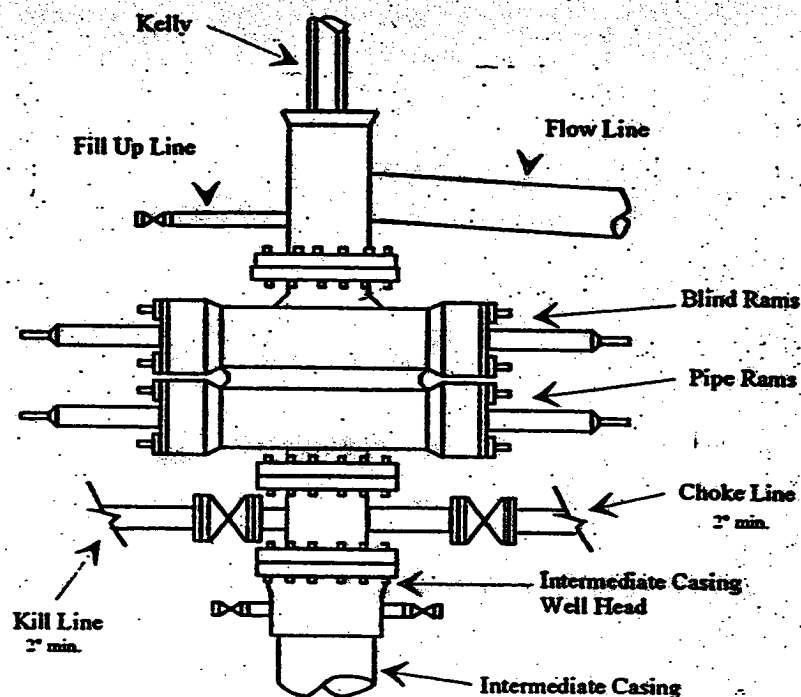




# Yates Petroleum Corporation

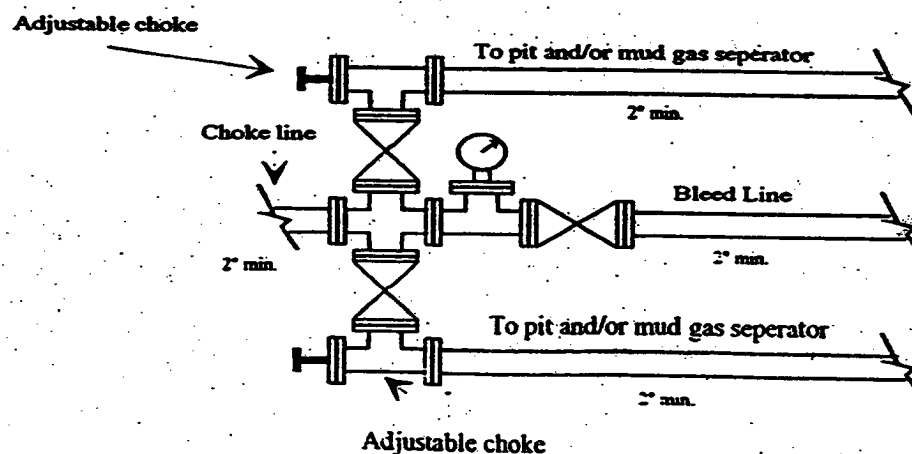
BOP-2

## Typical 2,000 psi Pressure System Schematic Double Ram Preventer Stack



Yates Petroleum Corporation  
Karen Federal #4  
1980' FNL & 660' FEL  
Section 26-T9S-R24E  
Chaves County, New Mexico  
Exhibit "B"

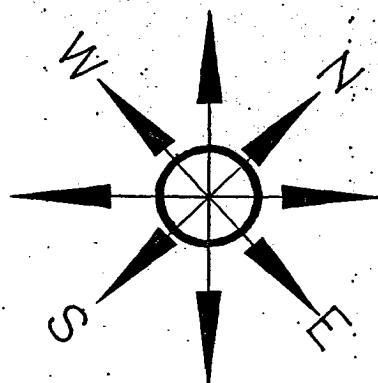
Typical 2,000 psi choke manifold assembly with at least these minimum features



# Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'



## Yates Petroleum Corporation

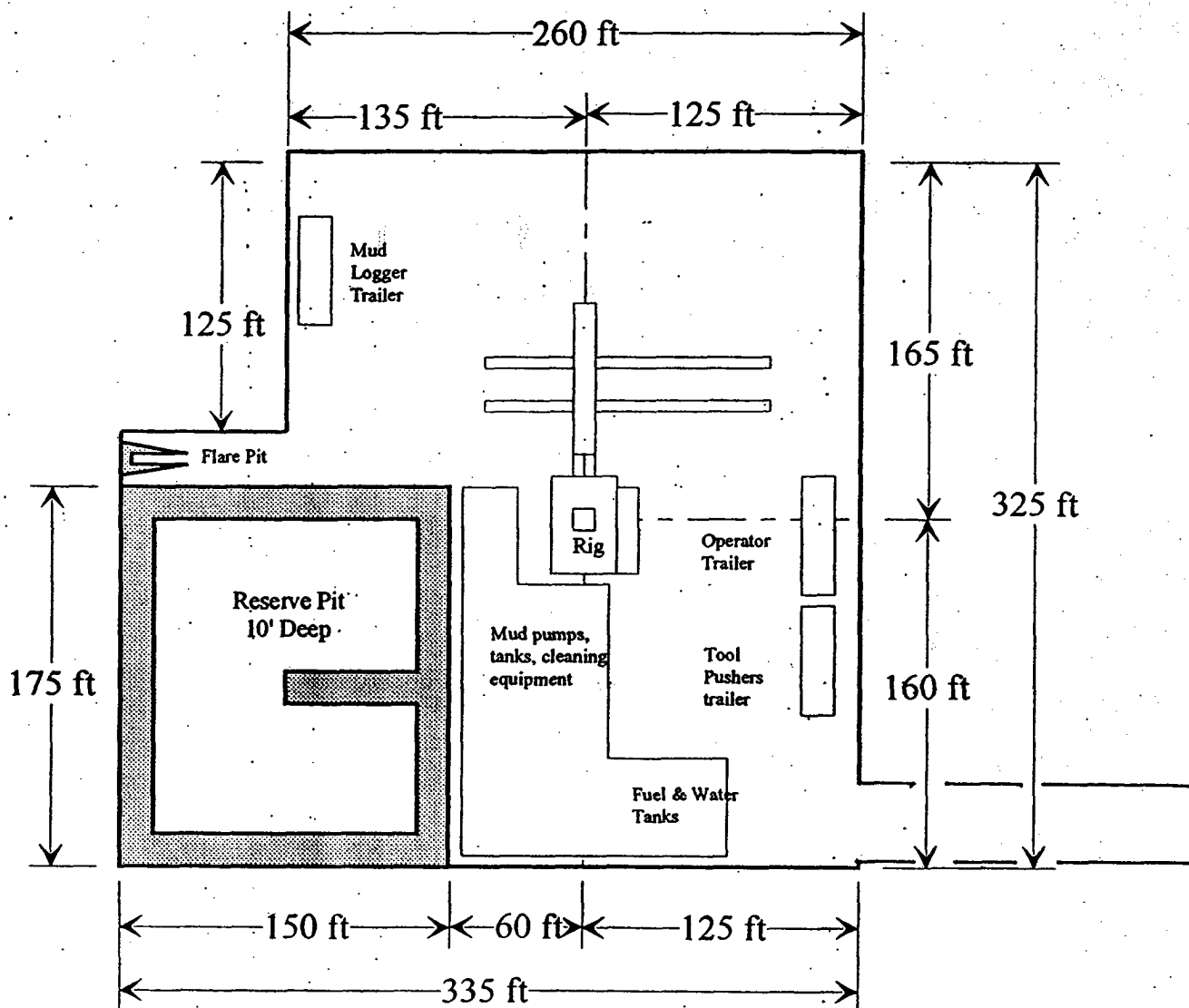
Karen Federal #4

1980' FNL & 660' FEL

Section 26-T9S-R24E

Chaves County, New Mexico

Exhibit "C"



Distance from Well Head to Reserve Pit will vary between rigs

The above dimension should be a maximum