

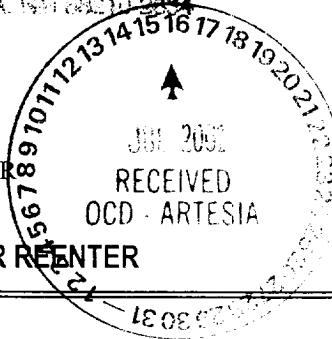
## N. M. Oil Cons. Division

511 S. 1ST ST.

ARTESIA, NM 88210-2824

Form 3160-3  
(August 1999)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.

NM-103573

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Buckaroo AYG Federal #1

9. API Well No.

30-015-31894

10. Field and Pool, or Exploratory

Wildcat Chester

11. Sec., T., R., M., or Blk. and Survey or Area

Section 1, T20S-R21E

12. County or Parish

Eddy

13. State

NM

1a. Type of Work: ☒ DRILL☐ REENTERb. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Yates Petroleum Corporation

3A. Address 105 South Fourth Street

Artesia, New Mexico 88210

3b. Phone No. (include area code)

(505) 748-1471

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface

990' FSL and 990' FWL

At proposed prod. Zone

Same

UNIT M

14. Distance in miles and direction from nearest town or post office\*

Approximately 29 miles northwest of Carlsbad, New Mexico.

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

990'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

S/2

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

19. Proposed Depth

8050'

20. BLM/BIA Bond No. on file

585997

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

4256' GL

22. Approximate date work will start\*

ASAP

23. Estimated duration

30 days

## 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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature

Name (Printed/Typed)

Date

Cy Cowan

4/16/01

Title:

Regulatory Agent

Approved by (Signature)

/s/ LESLIE A. THEISS

Name (Printed/Typed)

/s/ LESLIE A. THEISS

Date

JUL 12 2001

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICE

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.

APPROVAL FOR 1 YEAR

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)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

RECEIVED  
BUREAU OF LAND MGMT  
ROSWELL OFFICE

2001 APR 16 PM 2:39

District I  
1025 N. French Dr., Hobbs, NM 88240

District II  
811 South First, Arroyo, NM 88210

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

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name Wildcat Chester	
Property Code		Property Name BUCKAROO "AYG" FEDERAL			Well Number 1
OGRID No. 025575		Operator Name			Elevation 4256

10 Surface Location

UL or lot no. M	Section 1	Township 20-S	Range 21-E	Lot 100	Feet from the 990	North/South line SOUTH	Feet from the 660	East/West line WEST	County EDDY
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 100	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320		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

16				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
				Signature Cy Cowan Printed Name Regulatory Agent Title April 16, 2001 Date	
NM-103573				18 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 belief	
				APR 16 2001 Date of Survey Signature and Seal of Professional Surveyor NEW MEXICO REGISTERED LAND SURVEYOR 5412 NM PRS NO. 5412	

**YATES PETROLEUM CORPORATION**  
**Buckaroo "AYG" Federal #1**  
 990' FSL and 660' FWL  
 Section 1, T20S-R21E  
 Eddy County, New Mexico

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

Glorietta	1500'	Strawn	7360'
Tubb	2800'	Atoka	7540'
Abo	3460'	Morrow	7770'
Wolfcamp	4650'	Chester Lime	7940'
Cisco	5920'	TD	8050'
Canyon	6570'		

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

Water: 200' - 300'  
 Oil or Gas: All potential zones

**3. Pressure Control Equipment:** BOPE will be installed on the 8 5/8" 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 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>Thread</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-350'	350'
12 1/4"	8 5/8"	24#	J-55	ST&C	0-1600'	1600'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	100'-6900'	6800'
7 7/8"	5 1/2"	17#	S-95	LT&C	6900'-8050'	1150'

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

B. CEMENTING PROGRAM:

Surface casing: 400 sacks "C" + 2% CaCl<sub>2</sub> (YLD 1.32 WT 15.6)

Intermediate Casing: 600 sx Lite (YLD 2.0 WT 12.5). Tail in with 200 sx "C" + 2% CaCl<sub>2</sub> (YLD 1.32 WT 15.6)

Production Casing: TOC 4000'. 650 sacks Super "H" Modified (YLD 1.67 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>
Spud to 350'	FW/Air Mist	8.4	28	N/C
350'-1600'	FW/Air Mist	8.4	28	N/C
1600'-7500'	Cut Brine/4% KCL	8.6-9.2	28	N/C
7500'-8050'	Salt Gel/Starch	9.2-9.8	32-38	<10cc

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' out from under intermediate casing to TD.

Logging: Platform Express-HALS, Possible FMI, Rotary Sidewall cores.

Coring: As Warranted.

DST's: As Warranted, possible from top of Cisco.

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

**Anticipated BHP:**

From: 0	TO 350'	Anticipated Max. BHP:	175	PSI
From: 350'	TO 1600'	Anticipated Max. BHP:	700	PSI
From: 1600'	TO 8050'	Anticipated Max. BHP:	4000	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H<sub>2</sub>S Zones Anticipated: None

Maximum Bottom Hole Temperature: 189° F

8. **ANTICIPATED STARTING DATE:**

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 10 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**Yates Petroleum Corporation**  
**Buckaroo "AYG Federal #1**  
990' FSL AND 660' FWL  
Section 1, T20S-R21E  
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 the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 29 miles Northwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:**

Go south of Artesia of Highway 285 to Rock Daisy Road. Turn west on Rock Daisy and go to Armstrong Road. Turn south on Armstrong Road (CR 12) and go to the intersection of Armstrong Road and Deer Canyon Road (CR 24). Go down Deer Canyon Road for approx. 2 miles to a cattleguard. Continue for approx. .7 of a mile to an old two track going right. Follow two track along top of the ridge for approx. 1 mile. Road will "T". Turn right and follow two track to a gate. Go through gate continue on for approx. 1 mile. Road will come off top of ridge and cross Deer Canyon. Follow two track to the well location. Total milage from Deer Canyon Road to the location is approx. 2.5 miles.

**2. PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 2.5 of a miles in length from the point of origin to the southwest corner of drilling pad. The road will lie in a north/northeast 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. Traffic turnouts may 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 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 acquire any materials from the closest source at the time of construction of the well pad.

**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 within 90 days after abandonment.

**11. SURFACE OWNERSHIP: Bureau of Land Management, Carlsbad, New Mexico.**

**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:

Cy Cowan, Regulatory Agent  
Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Phone (505) 748-1471

B. Through Drilling Operations,  
Completions and Production:

Pinson McWhorter, 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.

4/15/01

  
Regulatory Agent



78048  
DEER CANYON RANCH

78041  
RUNYAN

BUCKAROO  
AYG FED #1

CR 24

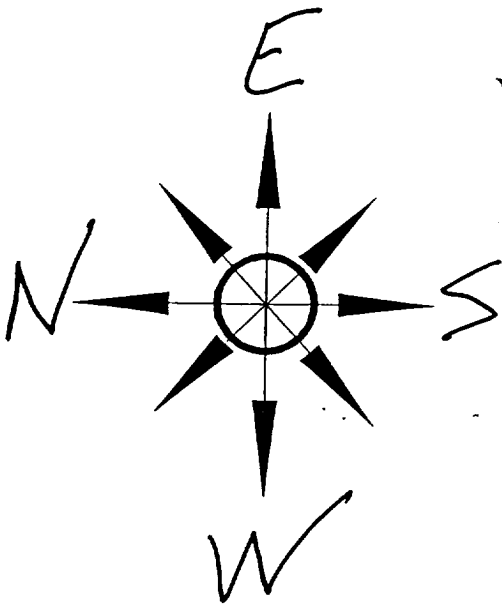
CR 21

CR 12

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

Buckaroo AYG Federal #1  
990' FSL and 660' FWL  
Section 1, T20S-R21E  
Eddy County, New Mexico  
NM-103573

FLUORPLAN  
○ - RANGELAND MONITORING STUDY  
HHH - PIPELINE TROUGH

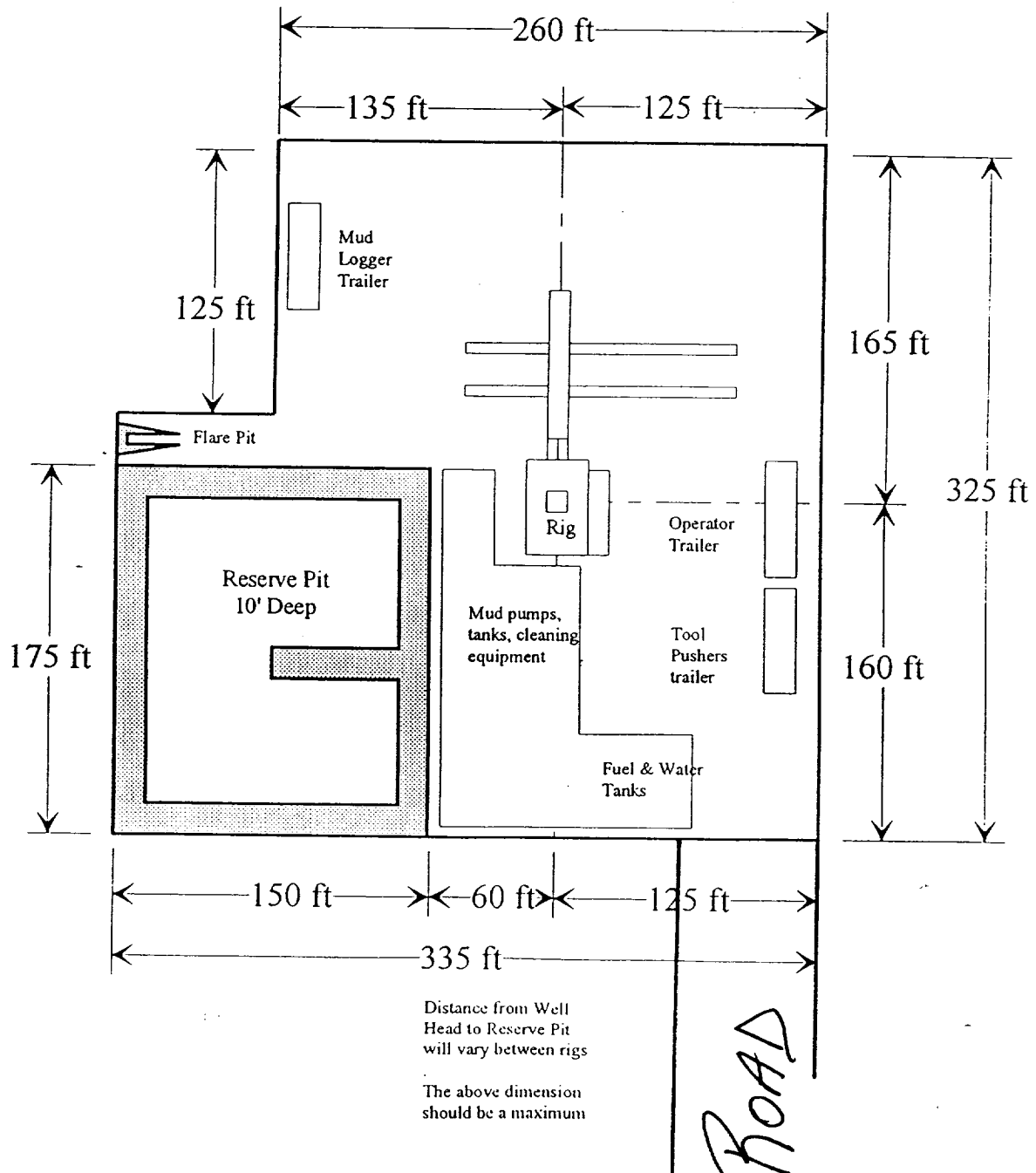


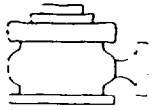
**Yates Petroleum Corporation**  
Location Layout for Permian Basin  
Up to 12,000'

PB - L1

Buckaroo AYG Federal #1  
990' FSL and 660' FWL  
Section 1, T20S-R21E  
Eddy County, New Mexico  
NM-103573

*Pits North.*

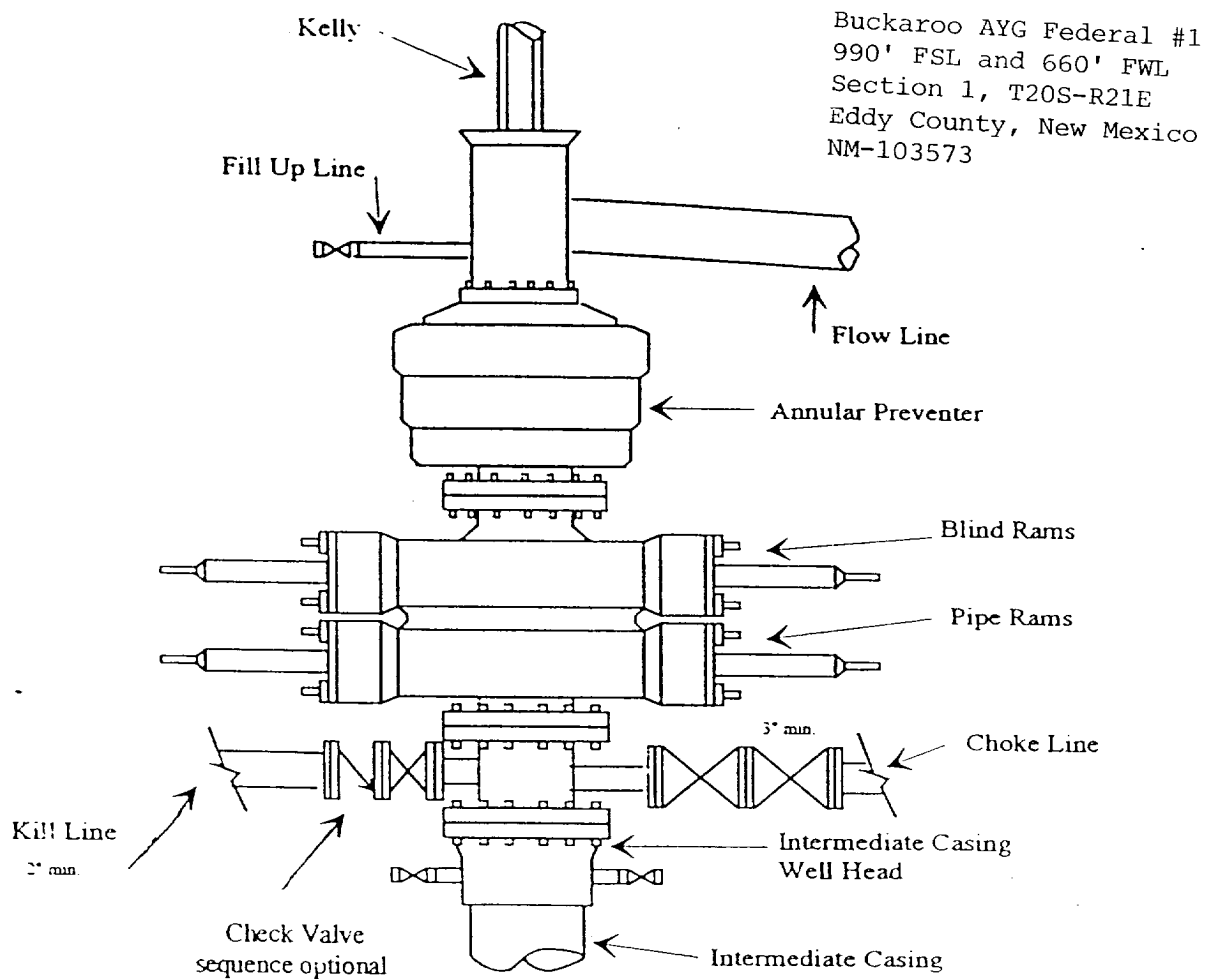




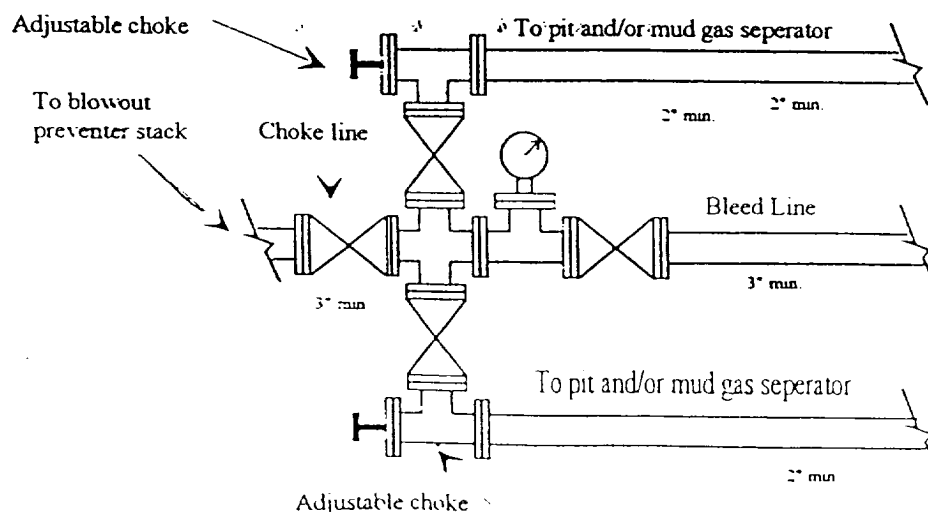
# Yates Petroleum Corporation

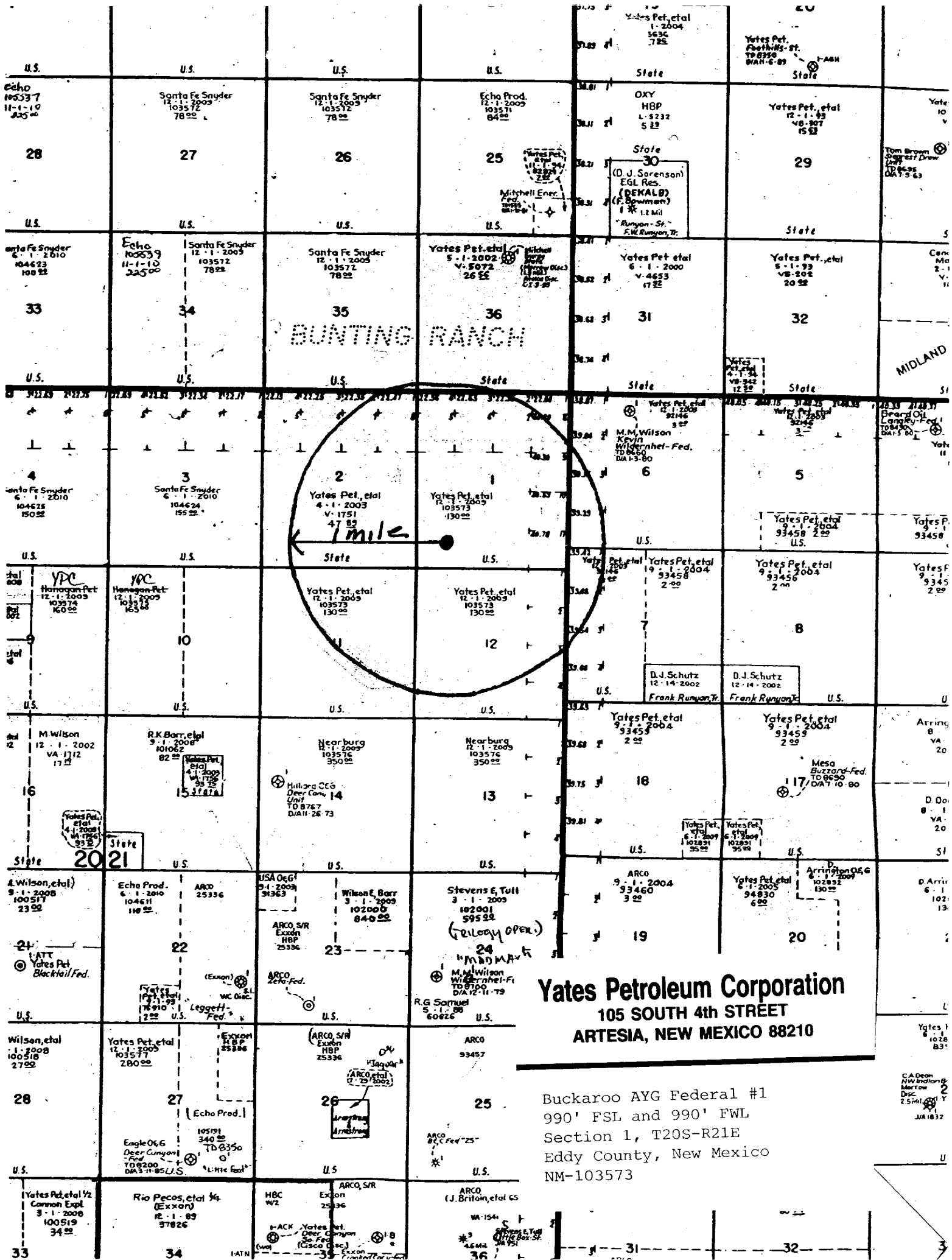
BOP-3

## Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features





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

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