

N. M. Oil Cons. Division

811 S. 1ST ST.

ARTESIA, NM 88210-2884

(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

7/11/97 SP
7-11-97

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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 Street, Artesia, New Mexico 88210 (505) 748-1471

4. LOCATION OF WELL (Report location clearly and include well permit State requirements.)

At surface

660' FSL and 510' FWL

At proposed prod. zone

Same

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

Approximately 33 miles southeast of Artesia, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 510'

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

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

3691' GR

23.

PROPOSED CASING AND CEMENT PROGRAM ROSWELL CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	9 5/8"	36# J-55	1150'	1100 sx Circulated
8 3/4"	7"	23# J-55	8200'	1300 sx Circulated
		36# N-80		

Yates Petroleum Corporation proposes to drill and test the Canyon and intermediate formations. Approximately 1150' of surface 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: 0-1150' FW Gel/LCM; 1150'-5200' FW; 5200'-7200' Cut Brine/KCL; 7200'-8200' Cut Brine/KCL/Starch.

BOPE PROGRAM: BOPE will be nipped up on the 9 5/8" casing and tested daily for operational.

Post ID-11-20-98 APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED
APE & Loc

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 [Signature] TITLE Landman DATE July 9, 1997

(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:

(ORIG. SGD.) TONY L. FERGUSON

ADM. MINERALS

APPROVED BY _____ TITLE _____ DATE 9-16-97

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
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 Dagger Draw Upper Penn, South
Property Code 025575	Property Name PRESTON FEDERAL		Well Number 20
OGRIID No.	Operator Name YATES PETROLEUM CORPORATION		Elevation 3691.

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	35	20-S	24-E		660	SOUTH	510	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

<p>16</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <u>Ken Beardemphl</u></p> <p>Printed Name: <u>Ken Beardemphl</u></p> <p>Title: <u>Landman</u></p> <p>Date: <u>July 9, 1997</u></p>			
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey: <u>JULY 13 1997</u></p> <p>Signature and Seal of Professional Surveyor: <u>[Signature]</u></p> <p>Certificate Number: <u>5412</u></p> <p>NM PE&PS NO. <u>5412</u></p>			
	<p>510</p> <p>660</p>			
	<p>NM-045290</p>			

**YATES PETROLEUM CORPORATION
PRESTON FEDERAL #20
660' FSL and 510' FWL
Section 35-T20S-R24E
Eddy County, New Mexico**

H2S Drilling Operations Plan

Personnel employed at the rig site shall receive training in H2S detection, safe drilling procedures and contingency plans. H2S safety equipment shall be installed and functional 3 days or 500 feet prior to encountering known or probable H2S zone at 3200' feet.

Submitted with the APD is a well site diagram showing:

- 1) Drilling rig orientation, location of flare pit.
- 2) Prevailing wind direction.
- 3) Location of access road.

Primary briefing area will be established 150' from wellbore and up wind of prevailing wind direction. Secondary briefing area will be established 180 degrees from primary briefing area.

A H2S warning sign will be posted at the entrance of the location. Depending on conditions, a green, yellow, or red flag will be displayed.

Green - Normal conditions

Yellow - Potential danger

Red - Danger H2S present

Wind indicators will be placed on location at strategic, highly visible areas. H2S monitors (a minimum of three) will be positioned on location for best coverage and response. H2S concentrations of 10 ppm will trigger a flashing light and 20 ppm will trigger an audible siren.

H2S breathing equipment will consist of:

- 1) 30 minute "pressure demand" type working unit for each member of rig crew on location.
- 2) 5 minute escape packs for each crew member.
- 3) Trailer with a "cascade air system: to facilitate working in a H2S environment for time period greater than 30 minutes.

PRESTON FEDERAL #20

Page 2

Breathing equipment will be stored in weather proof cases or facilities. They will be inspected and maintained weekly.

The mud system will be designed to minimize or eliminate the escape of H₂S at the rig floor. This will be accomplished through the use of proper mud weight, proper pH control of the drilling fluid and the use of H₂S scavengers in the drilling fluid. A mud gas separator will be utilized when H₂S is present in the mud.

Drilling experience has shown that wells in developmental areas, (i.e. Dagger Draw, Livingston Ridge Delaware, and Lusk Delaware) are normally pressured and don't experience either H₂S kicks or loss of returns. Due to these circumstances, we request exceptions to the rule requiring flare line with remote lighter and choke manifold with minimum of one remote choke. This equipment would be provided on exploratory wells or wells with the known potential for H₂S kicks. Additionally, a SO₂ monitor would be positioned near the flare line, and a rotating head utilized.

The drill string, casing, tubing, wellhead, blowout preventers and associated lines and valves will be suitable for anticipated H₂S encounters.

Radio and or mobile telephone communication will be available on site. Mobile telephone communication will be available in company vehicles.

Drill stem testing to be performed with a minimum number of essential people on location. They will be those necessary to safely conduct the test. If H₂S is encountered during a drill stem test, essential personnel will mask up and determine H₂S concentration. The recovery will then be reversed to flare pit. Pulling of test tools will be conducted in a safe manner.

YATES PETROLEUM CORPORATION

Preston Federal #20
660' FSL and 510' FWL
Sec.35, T20S-R24E
Eddy County, New Mexico

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

San Andres	600'
Glorietta	2100'
Bone Spring	3500'
Wolfcamp	5950'
Canyon	7450'
TD	8200'

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

Water: 250'-350'
Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 9 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>Coupling</u>	<u>Interval</u>
14 3/4"	9 5/8"	36#	J-55	ST&C	0-1150'
8 3/4"	7"	23#	J-55	LT&C	0-7450'
8 3/4"	7"	26#	N-80	LT&C	7450'-8200'

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

- B. CEMENTING PROGRAM:

Surface casing: 700 sx H, 12% Thicksad, 10# Gilsonite, 1/2# Celloseal, 2% CaCl₂.
Tail with 200 sx C, 2% CaCl₂.

Production Casing: 500 sx H, 5# CSE, 5# Gilsonite, 1/4# Celloseal.

2nd Stage: 750 sx Lite, 5# Salt, 5# Gilsonite, 1/4# Celloseal. Tail with 100 sx H.

5. MUD PROGRAM AND ANXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1150'	FW Gel/LCM	8.3 - 8.6	30	N/C
1150'-5200'	FW	8.3 - 8.6	28	N/C
5200'-7200'	Cut Brine/KCL	9.0 - 9.2	29	N/C
7200'-8200'	Cut Brine/KCL/Starch	9.2 - 9.0	30 - 34	10cc or less

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: CNL/LDT, DLL w/RXO.
 Coring: None
 DST's: As warranted.

7. ABNORMAL CONITIONS, BOTTOM HOLE PRESSURE, AND POTENTAL HAZARDS:

Anticipated BHP:

From: 0	TO: 1150'	Anticipated Max. BHP: 450 PSI
From: 1100'	TO: 8200'	Anticipated Max. BHP: 3000 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: Canyon.

Maximum Bottom Hole Temperature: 142 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 25 days to drill the well with completion taking another 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
Preston Federal #20
660' FSL AND 510' FWL
Sec. 35, T20S-R24E
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 33 miles South west of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go south of Artesia on Highway 285 to Rock Daisy Road. Turn west for approximately 8.5 miles then turn south and go approximately 3.6 miles on Sawbuck Road. Go south on caliche road for approximately 3 miles and turn east then south to location.

2. PLANNED ACCESS ROAD:

- A. Approximately 2/10th of a mile of new road will be built going east off of caliche road.

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.

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 closest pit and obtain any material 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 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: 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:

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

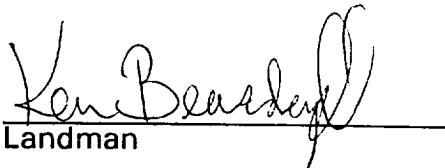
B. Through Drilling Operations,
Completions and Production:

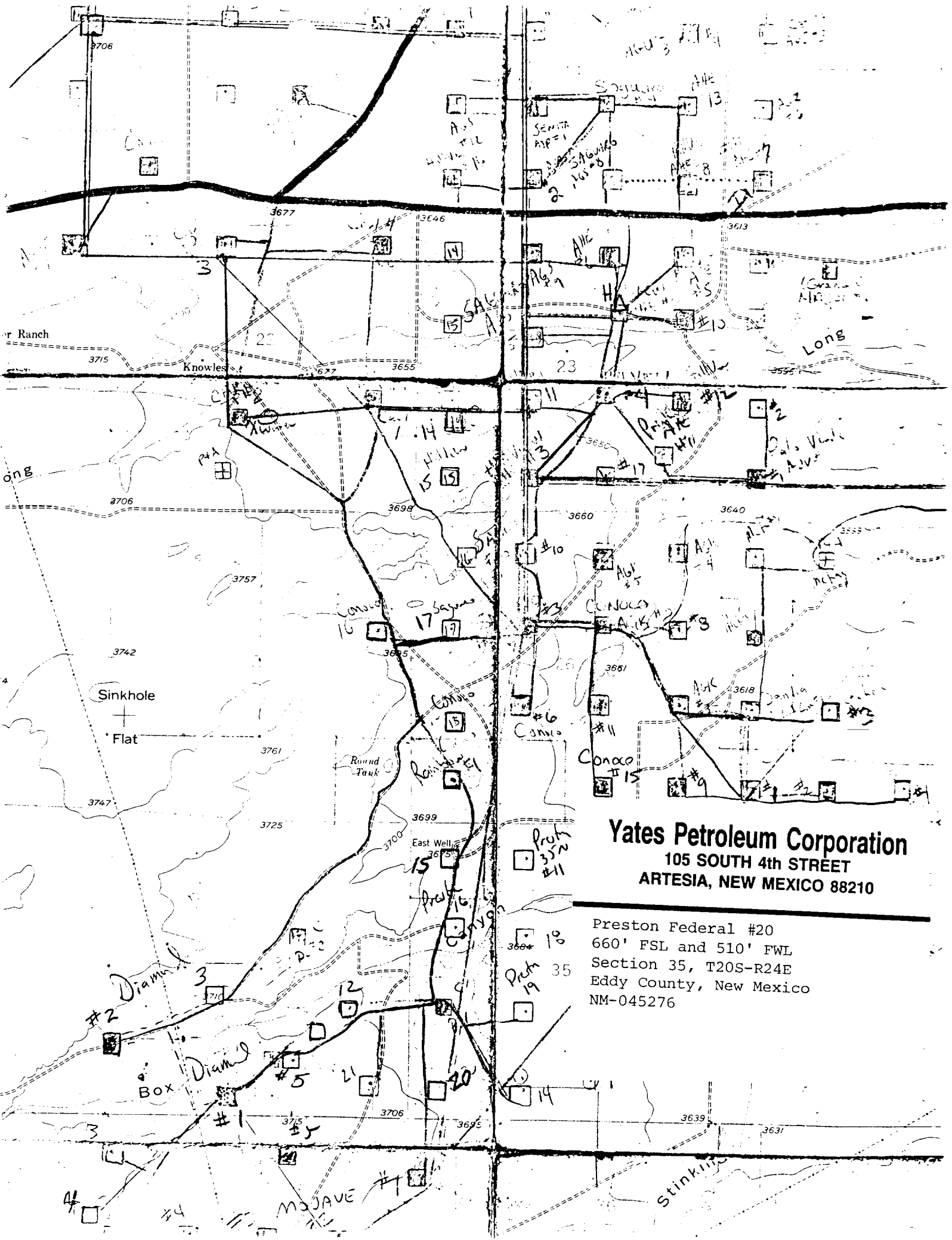
Brian Collins, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

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.

7/9/97


Landman



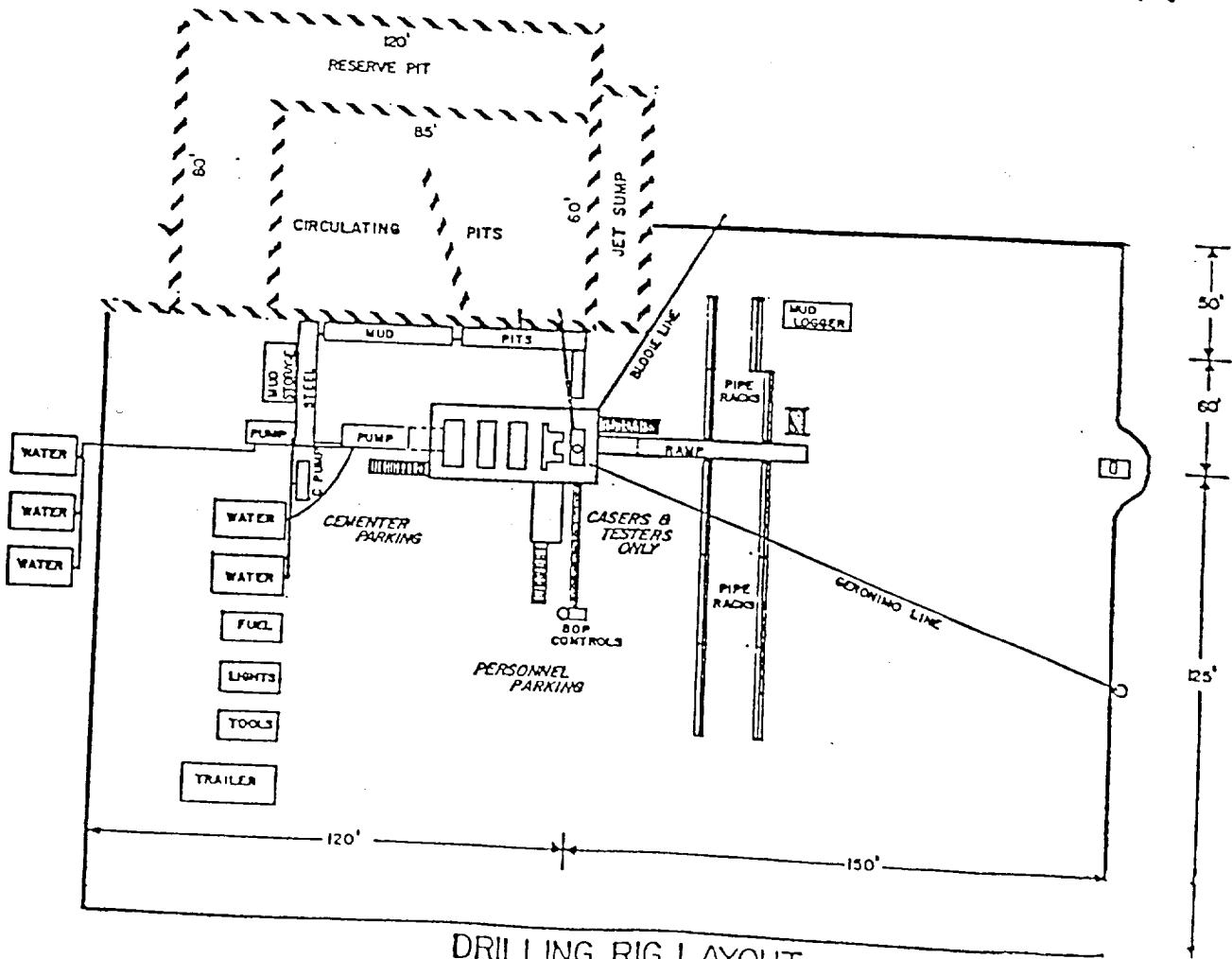
Yates Petroleum Corporation
105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

Preston Federal #20
660' FSL and 510' FWL
Section 35, T20S-R24E
Eddy County, New Mexico
NM-045276

YATES PETROLEUM CORPORATION

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

Preston Federal #20
660' FSL and 510' FWL
Section 35, T20S-R24E
Eddy County, New Mexico
045276

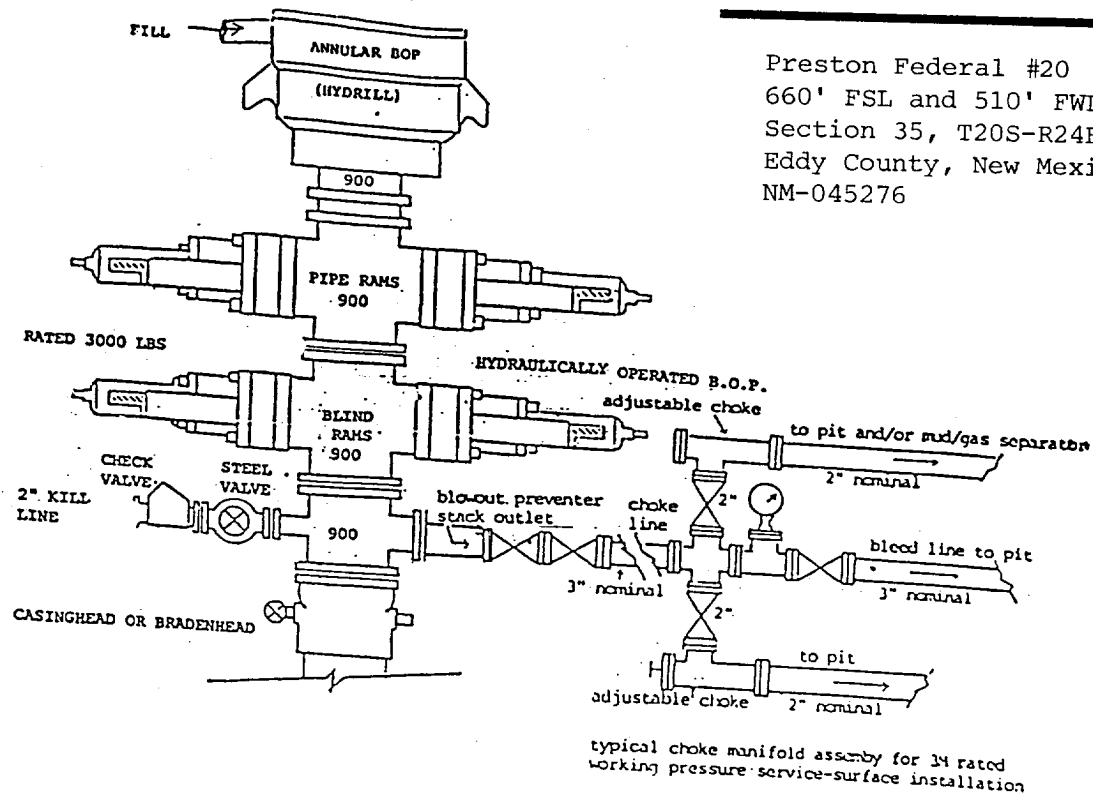


DRILLING RIG LAYOUT

Scale: 1 inch = 50 feet

YATES PETROLEUM CORPORATION

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



Preston Federal #20
660' FSL and 510' FWL
Section 35, T20S-R24E
Eddy County, New Mexico
NM-045276

EXHIBIT B

THE FOLLOWING CONSTITUTES THE MINIMUM BLOWOUT PREVENTER REQUIREMENTS FOR 3000 PSI WP SYSTEMS

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

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

Preston Federal #20
660' FSL and 510' FWL
Section 35, T20S-R24E
Eddy County, New Mexico
NM-045276

