

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

At surface

990' FNL & 990' FWL C

At proposed prod. zone

Same

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

Approx. 29 miles NW of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

990'

16. NO. OF ACRES IN LEASE

360

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
9000'20. ROTARY OR CABLE TOOLS
Rotary

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

22. APPROX. DATE WORK WILL START*
ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5# J-55	325'	200 sacks circulate
12 1/4"	9 5/8"	36# J-55	7500'	425 sacks circulate
8 3/4"	7"	23# + 26# J-55 + N-80	9000'	750 sacks

Yates Petroleum Corporation proposes to drill and test the Canyon and intermediate formations. Approximately 325' of surface casing will be set and cement circulated to shut off gravel and cavings. We will run intermediate casing and if commercial, production casing will be run and cemented, will perforate and stimulate as needed for production.

MUD PROGRAM: FW to 5000'; Salt Brine to 7500'; Salt Brine, Gel + Starch to TD.

BOP PROGRAM: Bop will be installed and tested daily.

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 8/12/93

(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 _____ TITLE _____

*See Instructions On Reverse Side

YATES PETROLEUM CORP.
BEFORE EXAMINER CATANACH
NMOCD CASE NO. 10823
DATE: 09/09/93
EXHIBIT NO. 2

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

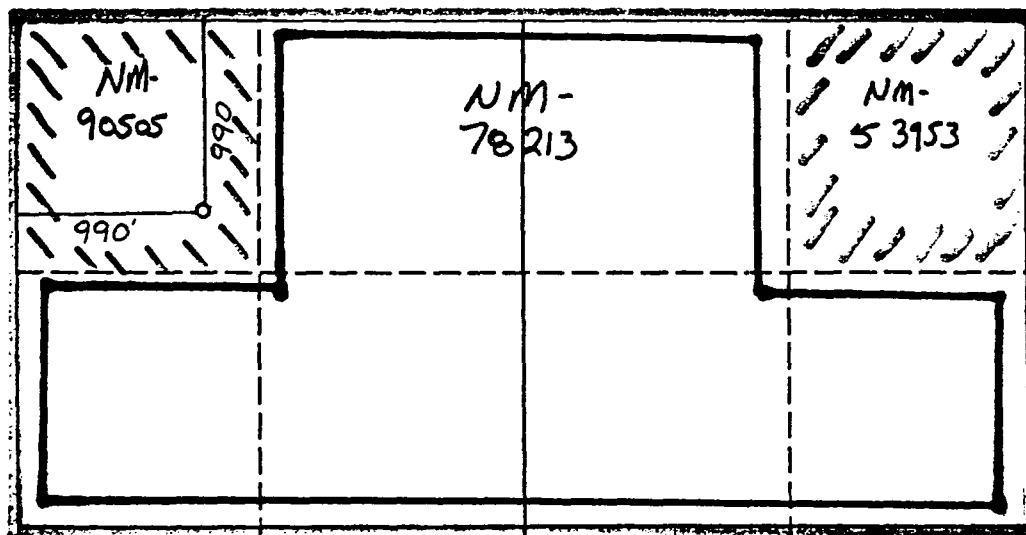
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator YATES PETROLEUM CORPORATION			Lease ATOM "ANT" FEDERAL COM		Well No. 1
Unit Letter D	Section 10	Township 22 SOUTH	Range 24 EAST	County EDDY COUNTY, NM	
Actual Footage Location of Well: 990 feet from the NORTH line and 990 feet from the WEST line					
Ground level Elev. 4001.	Producing Formation Canyon		Pool Indian Basin Upper Permian Pool	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, unitization, force-pooling, etc.?
☒ Yes ☐ No If answer is "yes" type of consolidation **Communization**
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 communization, 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.

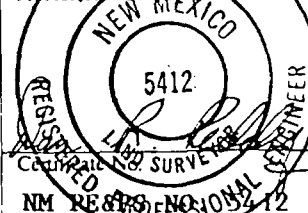
Signature
Ken Beardsley
Printed Name
Ken Beardsley
Position
Landman
Company
Yates Pet. Corp.
Date
8-18-93

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
AUGUST 17, 1993

Signature and Seal of
Professional Surveyor



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

YATES PETROLEUM CORPORATION

Atom "ANT" Federal #1
990' FNL and 990' FWL
Sec. 10-T22S-R24E
Eddy County, New Mexico

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

San Andres	603'
Delaware	1316'
Bone Springs	2325'
Wolfcamp	7394'
Canyon	7948'
TD	8900'

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

Water: 0-250'
Oil or Gas: 1316', 2325', 7394', 7948'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" 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>*Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8	54.50#	J55	8R	ST&C	0-325'	325'
12 1/4"	9 5/8"	36#	J55	8R	ST&C	0-2500'	2500'
8 3/4"	7"	23#	J55	8R	LT&C	0-7500'	7500'
8 3/4"	7"	26#	N80	8R	LT&C	7500-9000'	1500'

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

B. CEMENTING PROGRAM:

Surface casing: 200 sacks Class C + 2% CaCl₂ (circulate).

Intermediate Casing: Lead 375 sx Lite + Cellophane and Gilsonite, Tail 50 sx C + 2% CaCl₂.

Production Casing: Lead 500 sx Lite + Cellophane and Gilsonite, Tail 250 sx Class H + 2% CaCl₂.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-325'	Fresh	8.3 - 8.8	32-34	N/C
325'-5000'	Fresh	8.3 - 8.8	29	N/C
5000'-7200'	Brine	9.0 - 9.3	29	N/C
7200'-8900'	Brine + Gel + Starch	9.3 - 9.6	34-36	<15

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 from TD to casing with GR-CNL up to surface; DLL from TD to casing RXO from TD.

Coring: None anticipated.

DST's: As warranted.

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

Anticipated BHP:

From: 0	TO: 325'	Anticipated Max. BHP:	<100	PSI
From: 325'	TO: 2500'	Anticipated Max. BHP:	<1100	PSI
From: 2500'	TO: 9000'	Anticipated Max. BHP:	<4200	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: San Andres

H₂S Zones Anticipated: Canyon

Maximum Bottom Hole Temperature: 120 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 18 days to drill the well with completion taking another 7 days.

YATES PETROLEUM CORPORATION

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 7948 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 periods greater than 30 minutes.

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 gas is present in the mud.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation

Atom "ANT" Federal #1

990' FNL and 990' FWL

Sec. 10-T22S-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 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 north of Carlsbad on Highway 285 for 12.5 miles to Highway 137. Turn west and go 14 miles to caliche road. Turn east for 1.5 miles. New road starts here.

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 2.9 in length from the point of origin to the southeast edge of the drilling pad. The road will lie in a west to east 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. Some traffic turnouts 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 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 location will caliche itself or if material is needed, the dirt contractor will obtain it from the closest source.

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 the 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:

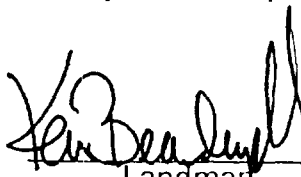
Ken Beardemphl, Landman
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

B. Through Drilling Operations,
Completions and Production:

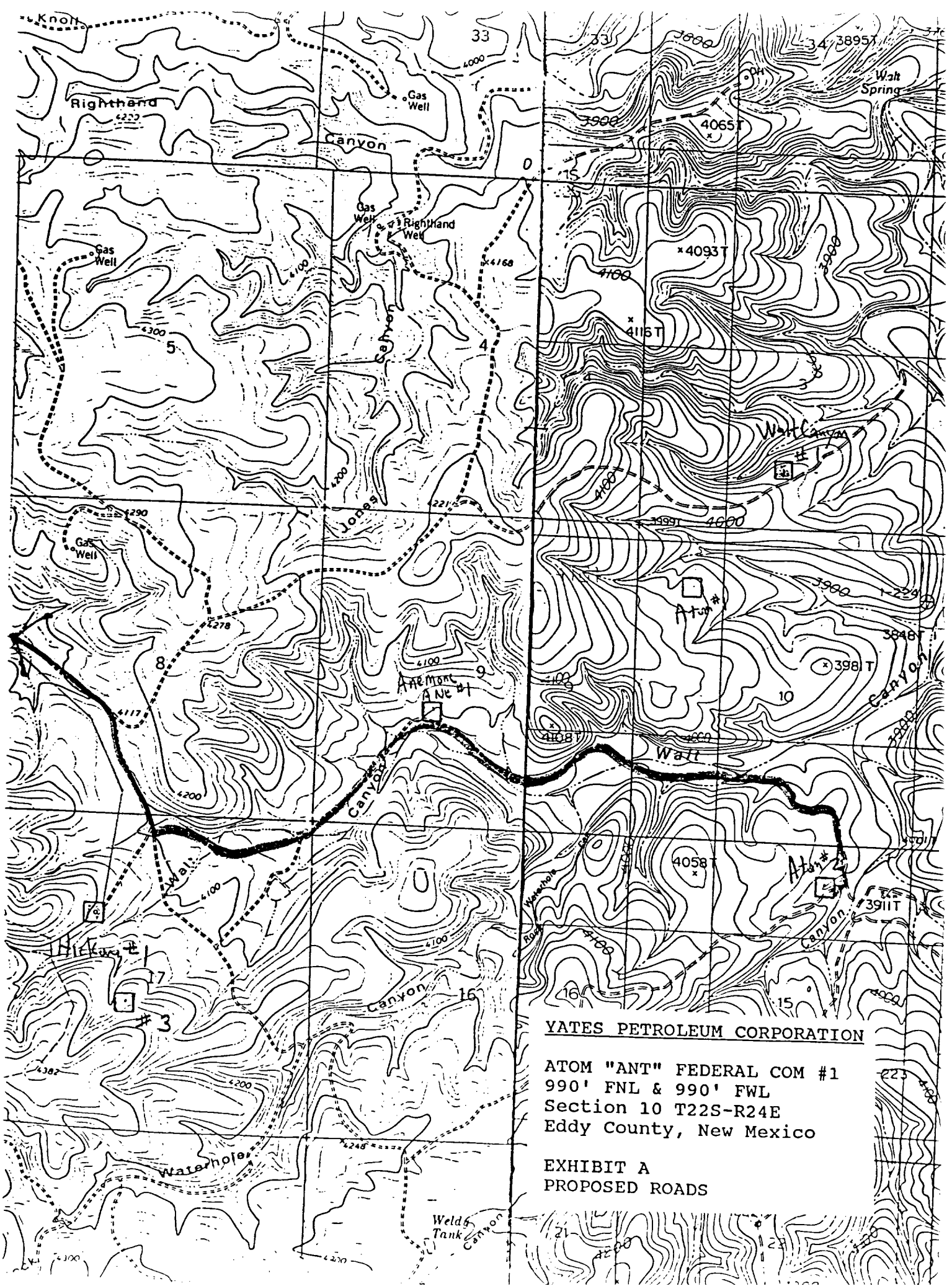
Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed 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.


Landman

8/13/93

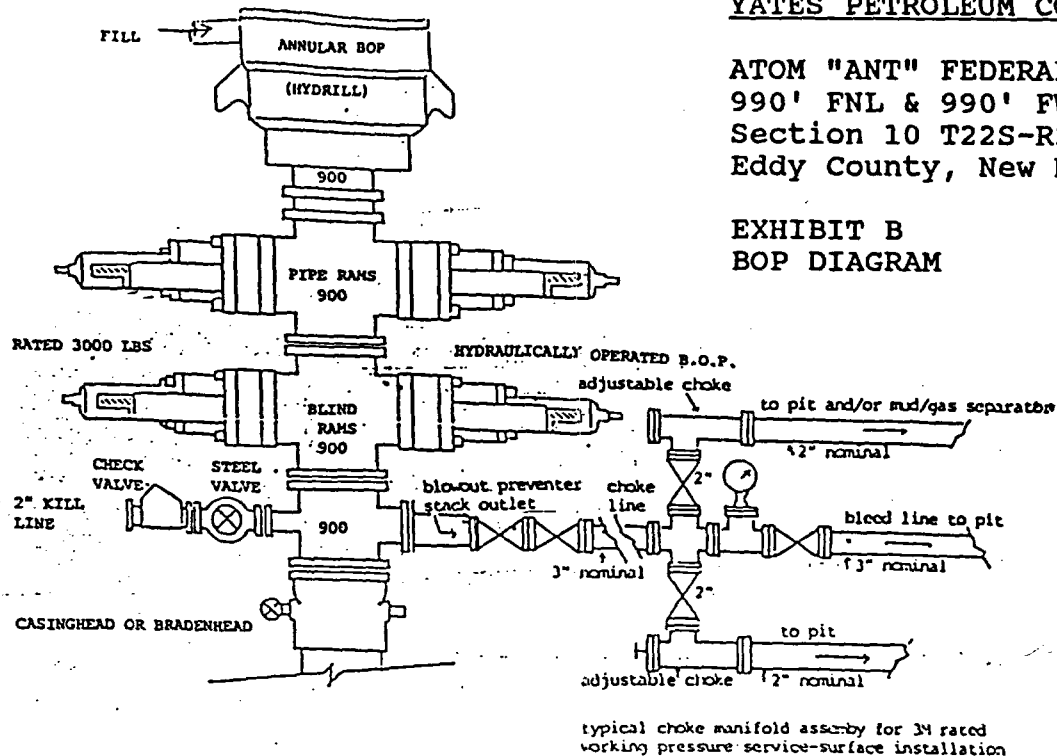


YATES PETROLEUM CORPORATION

ATOM "ANT" FEDERAL COM #1
990' FNL & 990' FWL
Section 10 T22S-R24E
Eddy County, New Mexico

EXHIBIT A
PROPOSED ROADS

YATES PETROLEUM CORPORATION



YATES PETROLEUM CORPORATION

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Eddy County, New Mexico

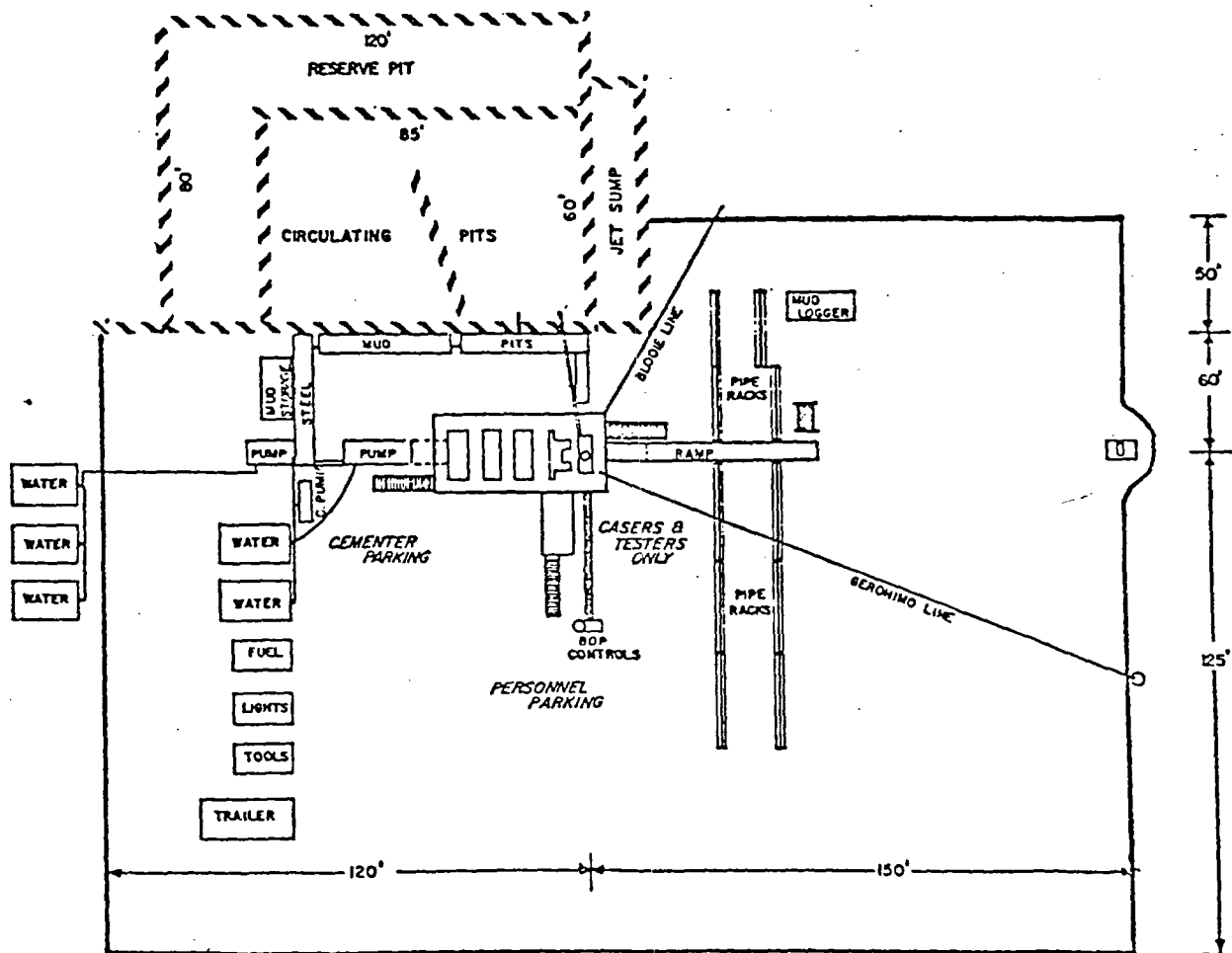
EXHIBIT B
BOP DIAGRAM

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



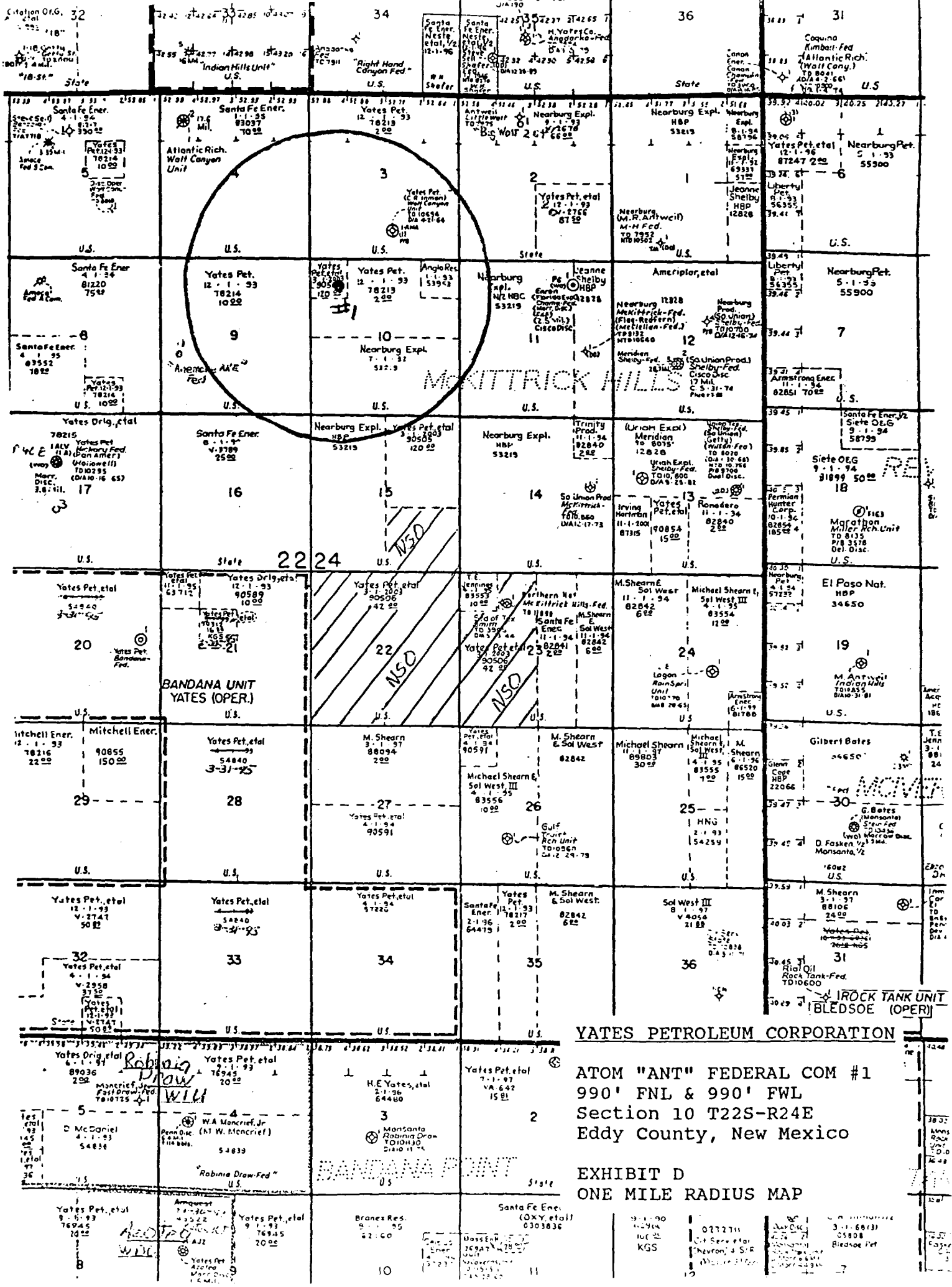
DRILLING RIG LAYOUT

Scale: 1 inch = 50 feet

YATES PETROLEUM CORPORATION

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EXHIBIT C
RIG LAYOUT



YATES PETROLEUM CORPORATION

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Eddy County, New Mexico

EXHIBIT D
ONE MILE RADIUS MAP