

NM OIL CONS. COMM. DIVISION
DRAWER DD SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)
UNITED STATES OF AMERICA, NM 88210
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-015-28062

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		RECEIVED AUG 11 '94
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. NAME OF OPERATOR Yates Petroleum Corporation ✓ 25575		
3. ADDRESS AND TELEPHONE NO. 105 South Fourth Street, Artesia, New Mexico 88210 O. C. D.		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface: 2166' FSL & 2253' FWL At proposed prod. zone: Same UT. K		
10. FIELD AND POOL, OR WILDCAT Indian Basin Upper Perm Assoc. Pool 23685 WILDCAT, MORROW 46038 Sec. 17-T22S-R24E		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx. 32 miles Northwest of Carlsbad, New Mexico		12. COUNTY OR PARISH Eddy
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		13. STATE NM
16. NO. OF ACRES IN LEASE 1816.40		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. 8520 → 10,500'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4344' GR		22. APPROX. DATE WORK WILL START* ASAP

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"	48# H-40	225'	150 sacks circulated
12 1/4"	8 5/8"	24# K-55 + S-80	2600'	625 sacks CIRCULATE
7 7/8"	5 1/2"	17# N-80	10500'	400 sacks (tie back 600' above Wolfcamp minimum) SJS

Yates Petroleum Corporation proposes to drill and test the Canyon and intermediate formations. Approximately 225' 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 225'; ~~Salt Brine~~ to 2200'; Salt Brine to TD.

BOP PROGRAM: Bop's will be installed and tested daily.

Per on site, moved location to this spot & V-Door West

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 8/5/93
(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 151 Scott Powers ACTING AREA MANAGER DATE 8/5/94

*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

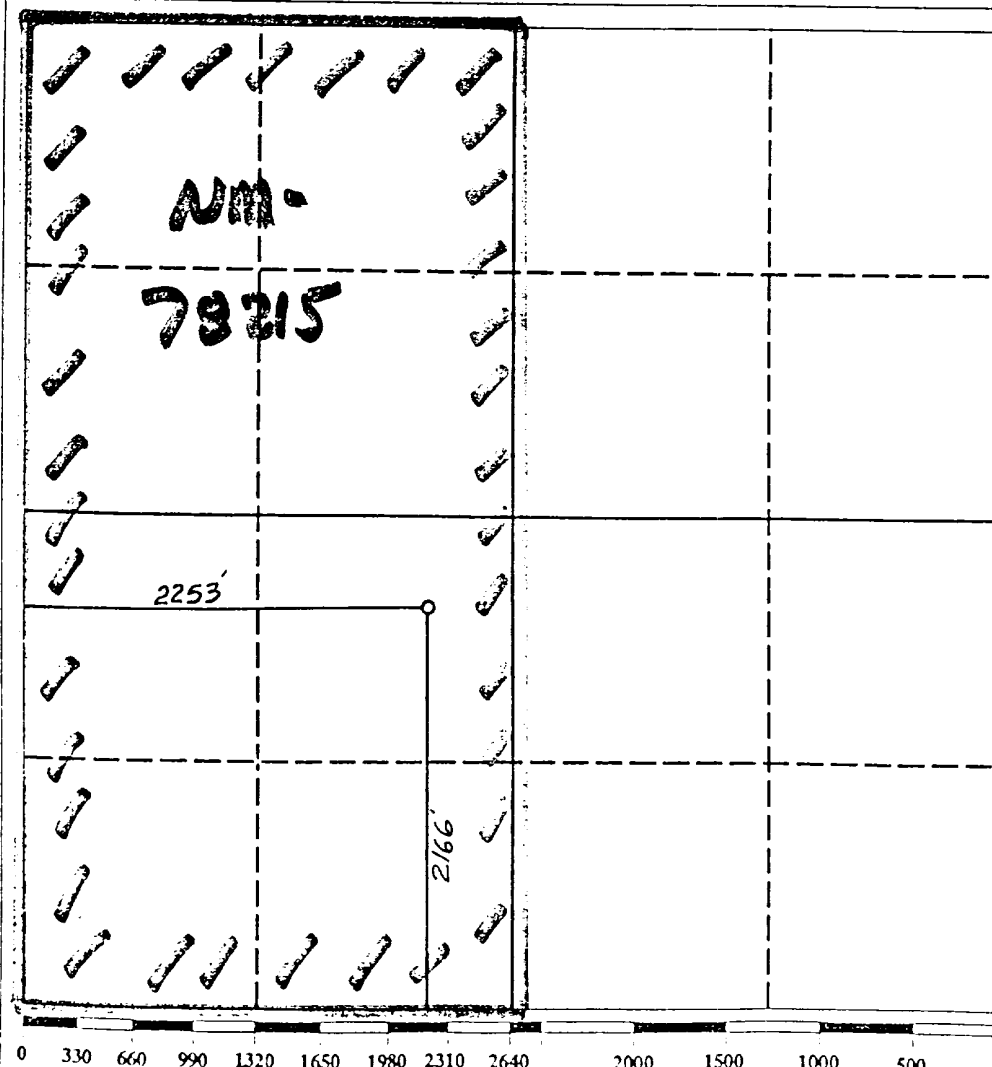
All Distances must be from the outer boundaries of the section

Operator YATES PETROLEUM CORPORATION			Lease HICKORY "ALV" FEDERAL		Well No. 3
Unit Letter K	Section 17	Township 22 SOUTH	Range 24 EAST	County EDDY COUNTY, NM	

Actual Footage Location of Well:

2166 feet from the SOUTH line and		2253 feet from the WEST line	
Ground level Elev. 4344.	Producing Formation Canyon MORROW	Pool Indian Basin-Upper Penn Arc. Pool	Dedicated Acreage: 320 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 _____
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 Beardsley*
Printed Name **Ken Beardsley**
Position **Landman**
Company **Yates Pet. Corp.**
Date **8-5-93**

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 3, 1993**
Signature of Professional Surveyor *[Signature]*
Professional Surveyor
NEW MEXICO
3412
ENGINEER
Certificate No. **3412**
NM PEPS NO. **3412**

YATES PETROLEUM CORPORATION

Hickory "ALV" Federal #3
2166' FSL and 2253' FWL
Sec. 17-T22S-R24E
Chaves County, New Mexico

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

San Andres	1165'
Glorietta	2670'
Bone Springs	3395'
Wolfcamp	7475'
Canyon	8271'
Lower Strawn	9016'
Atoka	9442'
Morrow	10004'
TD	10500'

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

Water: 0' - 200'
Oil or Gas: 8200' and 10500'

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	48#	H40	8R	ST&C	0-225'	225'
12 1/4"	8 5/8"	24#	K55	8R	ST&C	0-2200'	2200'
12 1/4"	8 5/8"	24#	S80	8R	ST&C	2200'-2600'	400'
7 7/8"	5 1/2"	17#	N80	8R	LT&C	0'-10500"	10500'

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

B. CEMENTING PROGRAM:

Surface casing: 150 sx Class "C" + 2% CaCl₂ (Circulate).

Intermediate Casing: Lead 525 sx Lite + Cellophane, Tail 100 sx Class "C" + 2% CaCl₂.

Production Casing: Lead 125 sx Lite + Cellophane, Tail 275 sx "H" + 2% Gel.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-225'	Fresh	8.3 - 9.0	25-40	N/C
225-2200'	Salt FW	9.3 - 10	25-40	N/C
2200-10500'	Salt SS	9.5 - 10	25-40	< 15 cc in Pay

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 surface casing to TD.

Logging: CNL/LDT, DLL W RXO.

Coring: None

DST's: As warranted.

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

Anticipated BHP:

From: 0'	TO: 225'	Anticipated Max. BHP:	< 100	PSI
From: 225'	TO: 2200'	Anticipated Max. BHP:	< 1000	PSI
From: 2200'	TO: 10500'	Anticipated Max. BHP:	< 5000	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Possible in San Andres.

H₂S Zones Anticipated: Possible in Canyon

Maximum Bottom Hole Temperature: 130 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 21 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 1165 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.

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.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation
Hickory "ALV" Federal #3
2166' FSL and 2253 FWL
Sec. 17-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 32 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 on Caliche road for 1.5 miles. Take right, fork in road. Will use and upgrade two track road going south for approximately 2000'. Will turn west and do a new road to location.

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 4000' in length from the point of origin to the northeast of the drilling pad. The road will lie in a South 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. 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 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.

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

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

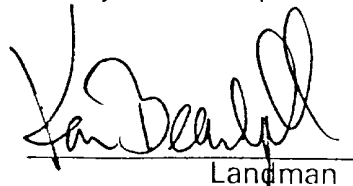
- B. Through Drilling Operations,
Completions and Production:

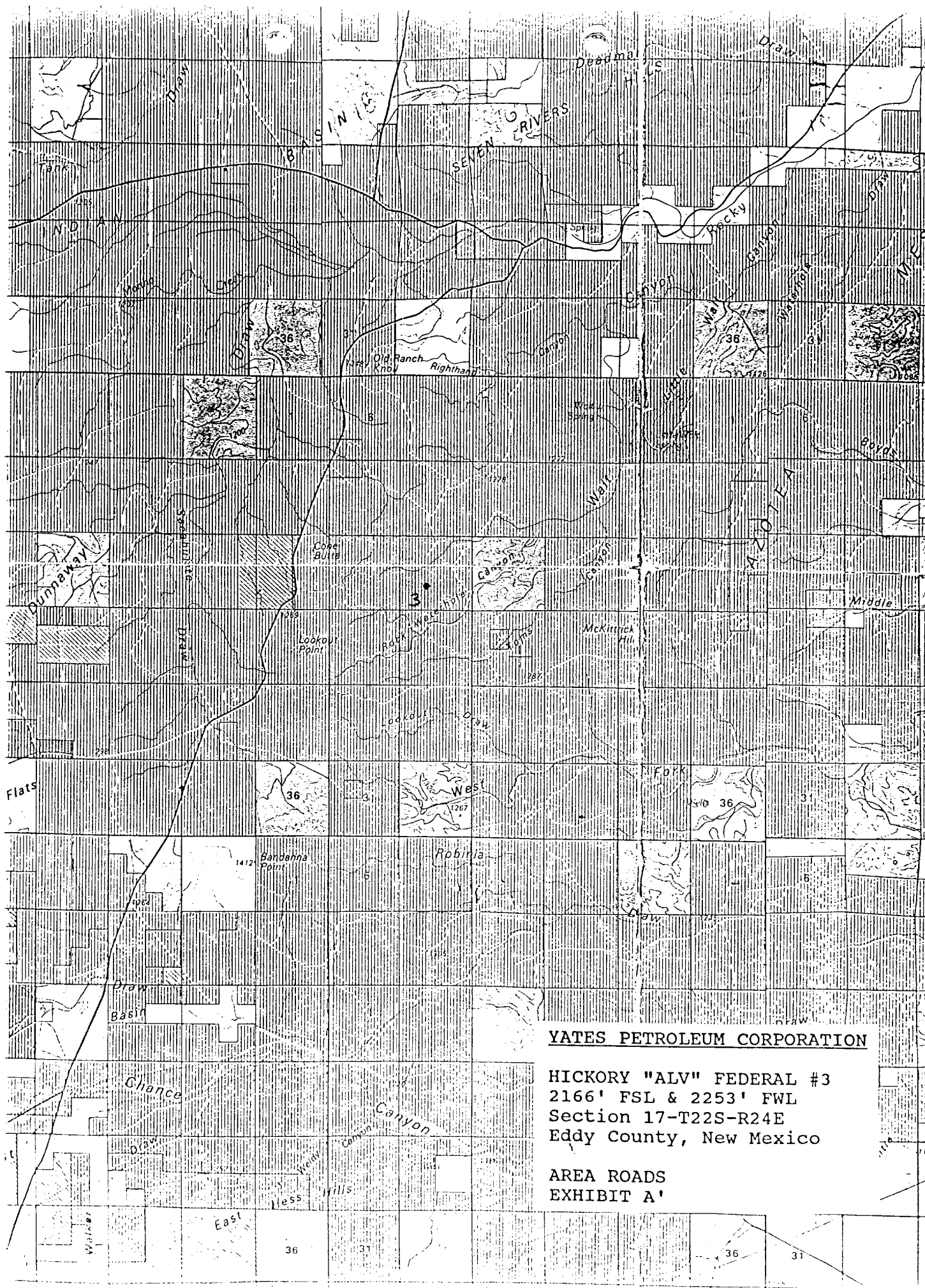
Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. CERTIFICATION:

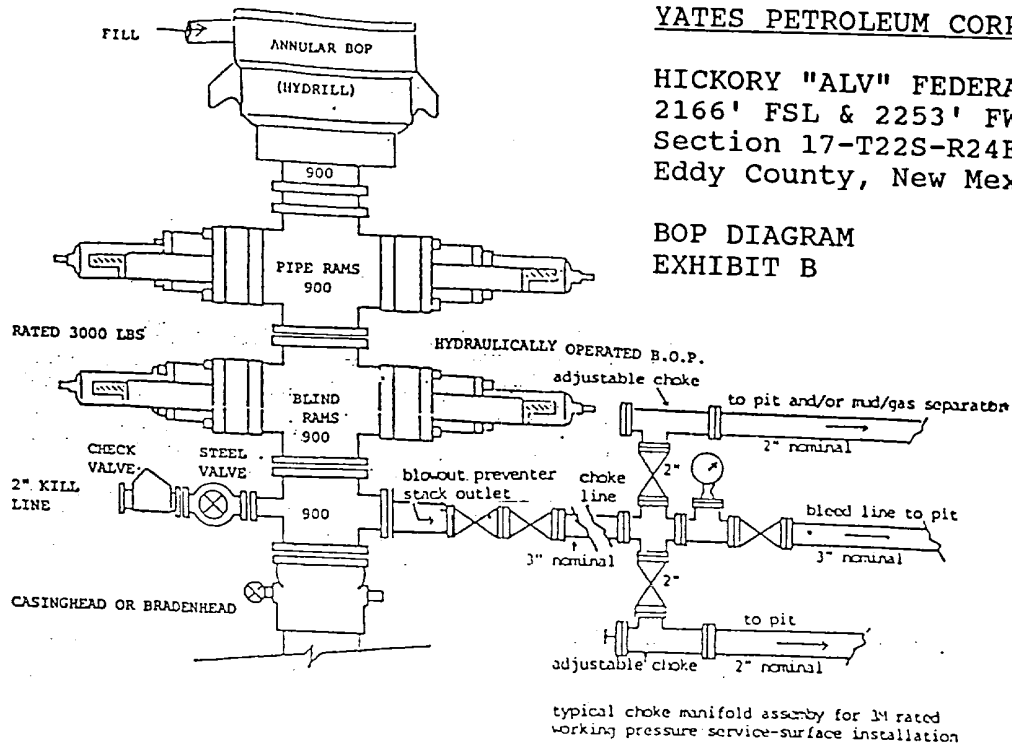
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated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

8/5/93


Landman



YATES PETROLEUM CORPORATION



YATES PETROLEUM CORPORATION

HICKORY "ALV" FEDERAL #3
2166' FSL & 2253' FWL
Section 17-T22S-R24E
Eddy County, New Mexico

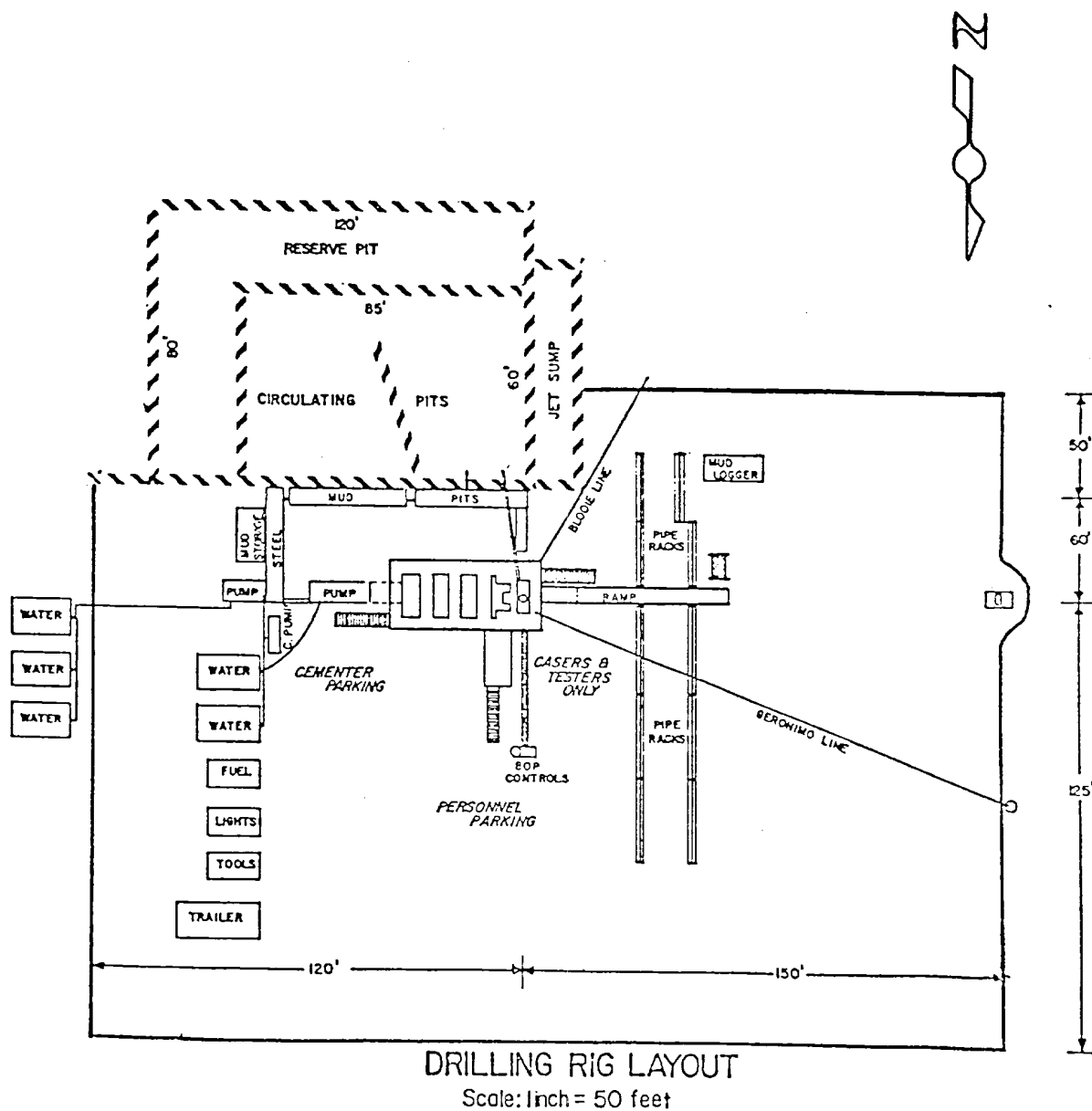
BOP DIAGRAM
EXHIBIT B

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



YATES PETROLEUM CORPORATION

HICKORY "ALV" FEDERAL #3
2166' FSL & 2253' FWL
Section 17-T22S-R24E
Eddy County, New Mexico

RIG LAYOUT
EXHIBIT C

