

Form 3160-3
(July 1992)

NM OIL & GAS COMMISSION
DRAWER UD
ARTESIA, NM 88210
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

30-015-27796

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

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

480' FWL and 330' FNL

At proposed prod. zone

Same

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

6 miles from Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED*

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

330'

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

150'

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

7500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3526' GR

22. APPROX. DATE WORK WILL START*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

Secretary's Potash

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	580'	850 sacks CIRCULATE
12 1/4"	9 5/8"	36 #	1700'	1850 sacks CIRCULATE
7 7/8"	5 1/2"	15.5# & 17#	TD	1425 sacks (tie back)

Yates Petroleum Corporation proposes to drill and test the Bone Spring and intermediate formations. Approximately 580' of surface casing will be set and cement circulated. An intermediate string of casing will be set at approximately 1700' and cement circulated. If commercial, production casing will be set and cemented with adequate cover, will perforate and stimulate as needed for production.

MUD PROGRAM: FW GEL/LCM to 580'; Brine to 1700'; Cut brine to 6600'; and
SW GEL/Starch to TD.

BOPE PROGRAM: BOPE will be installed on the 13 3/8' casing and tested operational 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

Clifton R. May

TITLE Permit Agent

DATE 10/14/93

(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:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

APPROVED BY

1/ Kathy Eton

TITLE

Acting State Director

DATE

12-6-93

*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

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 PENNZOIL "MZ" FEDERAL		Well No. 3
Unit Letter D	Section 11	Township 18 SOUTH	Range 30 EAST	NMPM	County EDDY
Actual Footage Location of Well: 480 feet from the WEST line and 330 feet from the NORTH line					
Ground level Elev. 3526	Producing Formation BONE SPRING		Pool WALTERS LAKE BONE SPRING		Dedicated Acreage: 40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 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.

480' 330' NM-28099			

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature
Clifton R. May
Printed Name
CLIFTON R. MAY
Position
PERMIT AGENT
Company
YATES PETROLEUM COMPANY
Date
10-14-93

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

10/09/93

Signature & Seal of
Professional Surveyor

HERSCHEL
L. JONES
Certificate No. 3640
3640
REGISTERED LAND SURVEYOR

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

YATES PETROLEUM CORPORATION
PENNZOIL "MZ" FEDERAL #3
480' FWL AND 330' FNL
Sec. 11-T18S-R30E
EDDY COUNTY, NEW MEXICO

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

Rustler	452'	Grayburg	3060'
Salt	655'	Loco Hills Sand	3194'
Base of Salt	1408'	Premier Sand	3553'
Yates	1628'	San Andres	3625'
Seven Rivers	2024'	Lovington Sand	3773'
Bowers	2446'	Bone Spring Lime	4759'
Queen Sand	2660'	1st Bone Spring Sand	6979'
Penrose Sand	2840'	TD	7500'

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

Water:	300' to 450'
Oil:	6995' - Oil

3. Pressure Control Equipment: BOPE will be installed on the 13 3/8" casing and rated for 3M 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"	54.5#	J55	8R	ST&C	0	580'
12 1/4"	9 5/8"	36#	J55	8R	ST&C	0	1700'
7/78"	5 1/2"	17#	J55	8R	LT&C	0	720'
7/78"	5 1/2"	15.5#	J55	8R	LT&C	720'	7320'
7/78"	5 1/2"	17#	J55	8R	LT&C	7320'	7500'

Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80

B. CEMENTING PROGRAM:

Surface casing: 200 sacks "H" + 12% THIXAD + 1/2#/sacks Celloseal + 10#/sacks Gilsonite + 2% CaCl₂ (yield 1.54 wt. 14.5) + CaCl₂ (yield 1.95 wt. 12.6) tailed in with 200 sacks "C" with 2% CaCl₂ (yield 1.32 wt. 14.8).

Intermediate Casing: 1200 sacks Pacesetter Lite "C" with 1/4# Cellocel, 5# salt per sack (yield 1.92 wt. 12.7) tailed in with 250 sacks "C" with 2% CaCl₂ (yield 1.32 wt. 14.8).

Production Casing: 1225 sacks Pacesetter Lite "C" + 0.4% CF-14 + 5#sacks Gilsonite + 5#/sacks Salt + 1/4#/sacks Cello-seal (yield 2.05 wt. 12.3) tailed in with 200 sacks "H" + 8#/sacks CSE + 0.35% Thriftylite + 0.5% CF14 (yield 1.67 wt. 13.8).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-580'	FWGEL/LCM	8.4-9.5	33-40	N/C
580'	Brine	10.0	28	N/C
3900'-6600'	Cut Brine	9.0-10.0	28	N/C
6600'-TD	SW Gel Starch	9.0-10.0	32-36	<10-12cc

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 from surface to TD.

Logging: 1st run: CNL-LDT from about 3680'-csg w/GR-CNL on up to surface; DLL w/Rxo from about 3680'-csg. 2nd run: CNL-LDT from TD-csg; DLL w/Rxo from TD-csg.

Coring: None.

DST's: As warranted.

Mud logging: One man unit out from under surface csg at approx. 570' to TD.

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

Anticipated BHP:

From: 0	TO: 580	Anticipated Max. BHP:	225	PSI
From: 580	TO: 3900	Anticipated Max. BHP:	1400	PSI
From: 3900	TO: 7500	Anticipated Max. BHP:	3000	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: None anticipated during drilling.

Maximum Bottom Hole Temperature: 140 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 20 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 3600 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
PENNZOIL "MZ" FEDERAL #3
480' FWL AND 330' FNL
Sec. 11-T18S-R30E
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 6 miles South of Loco Hills, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east out of Artesia to Loco Hills. Turn right on Eddy Co. 217. Go .3 of a mile and turn left on caliche road. Follow this main caliche road 5.5 miles to the Pennzoil MZ Federal #2 pad. New access will start here and go to the southwest corner of Pennzoil #1 pad.

2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 2000' in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a(n) southerly 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 both sides. One traffic turnout 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.

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.
- C. A 3" steel surface flowline will be laid along the north side of access road to the tank battery on Pennzoil MZ Federal #2 pad.

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:

Federal pit NWNE of Section 35-T17S-R30E.

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. Due to water flow an auxiliary pit is requested.
- C. A drive around road around the pits is requested.
- D. The Pennzoil "MZ" #1 pad will be a part of this pad. Center holes are 150' apart.
- E. A 400' x 400' area has been staked for archaeological survey.

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:

Clifton R. May, Permit Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

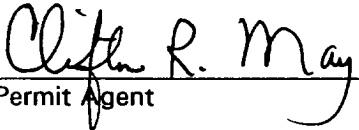
B. Through Drilling Operations,
Completions and Production:

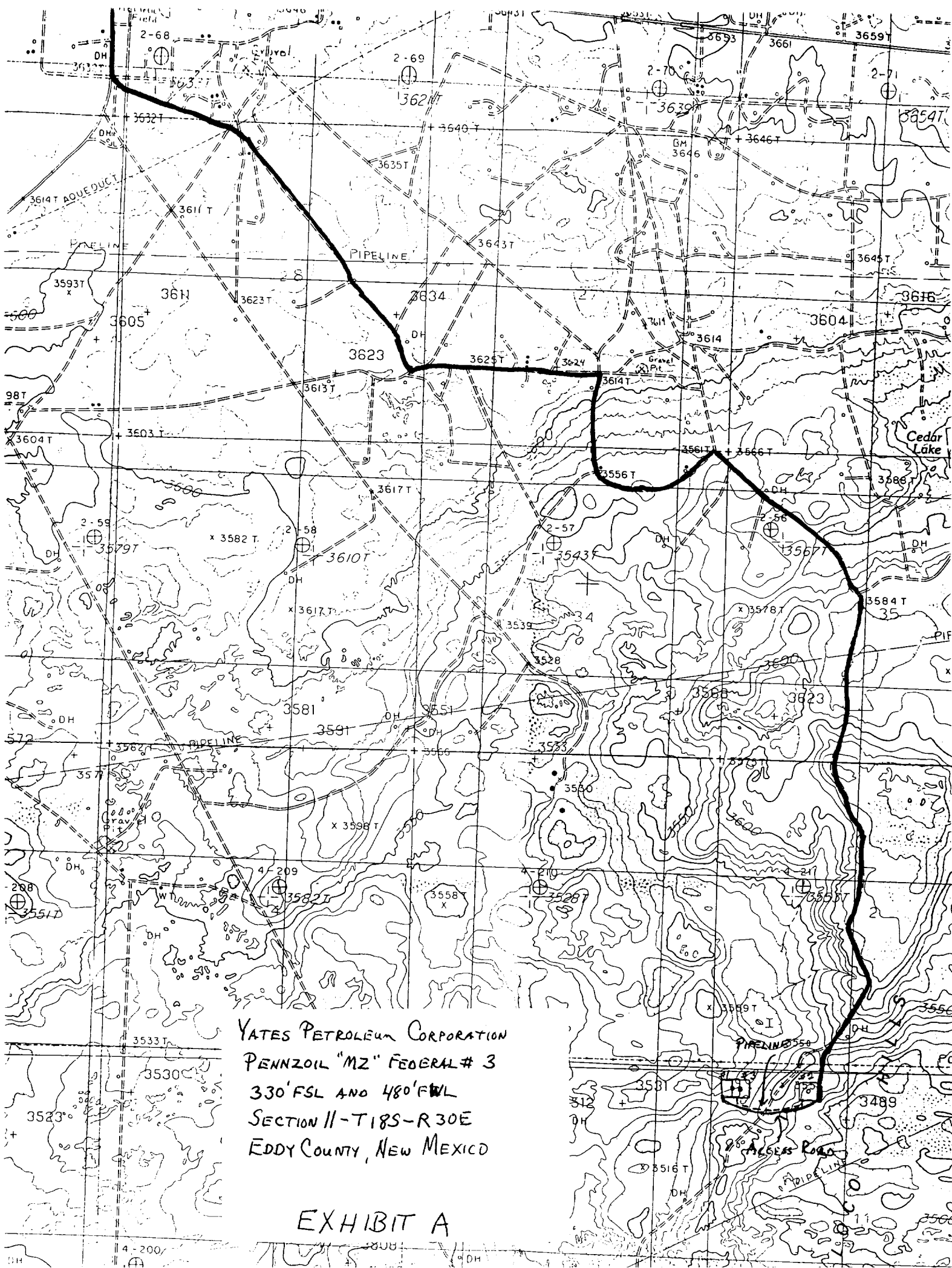
Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

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.

10-14-93
Date


Permit Agent

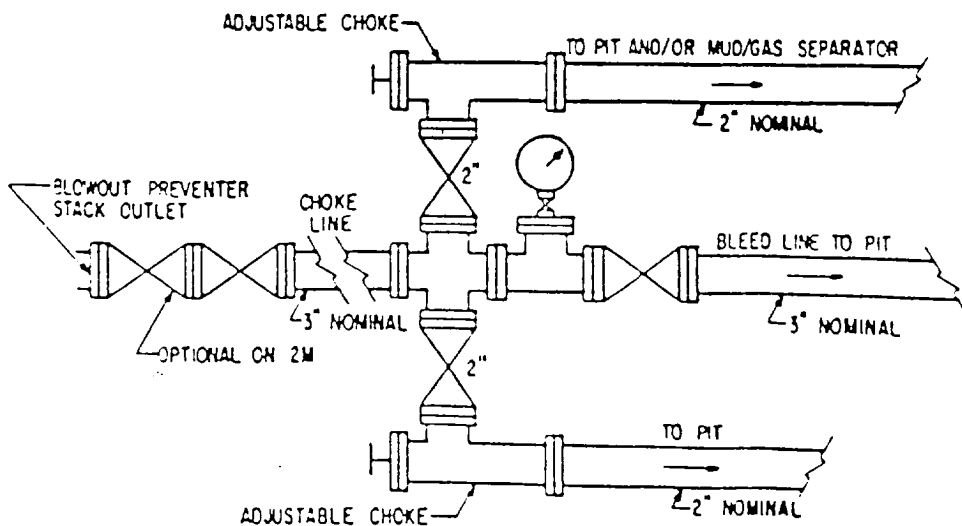
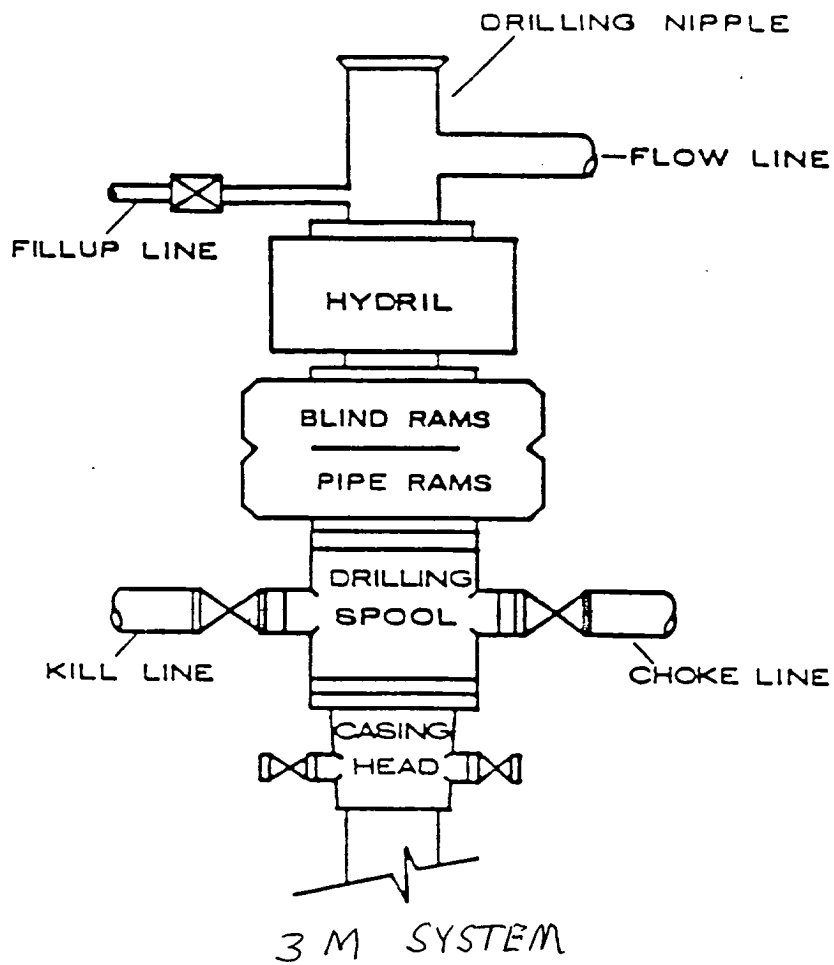


YATES PETROLEUM CORPORATION
PENNZOIL "MZ" FEDERAL # 3
330' FSL AND 480' FWL
SECTION 11-T18S-R30E
EDDY COUNTY, NEW MEXICO

EXHIBIT A

EXHIBIT B

BOP STACK



YATES PETROLEUM CORPORATION

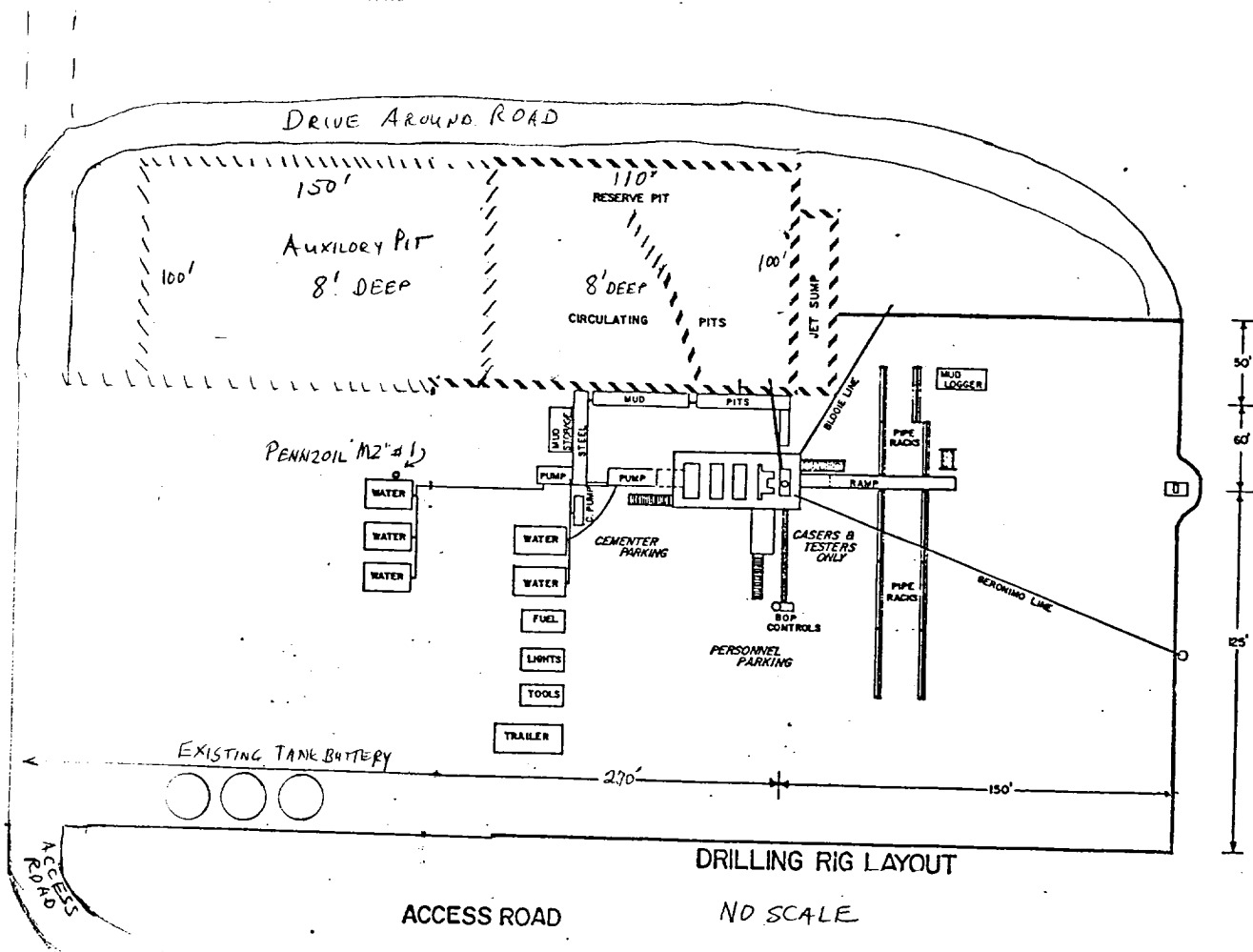
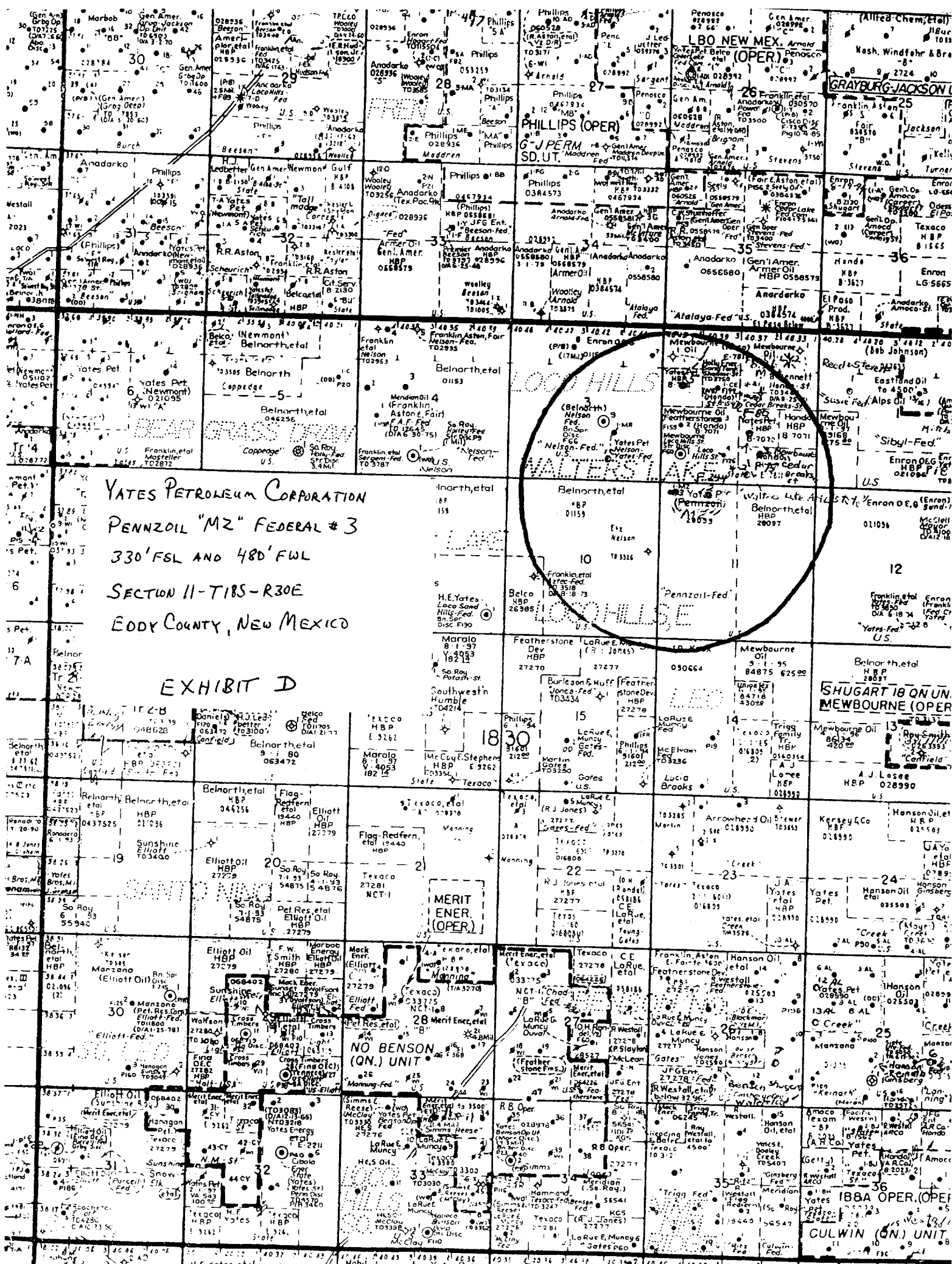


EXHIBIT C



YATES PETROLEUM CORPORATION
PENNZOIL "M2" FEDERAL #3
330' FSL AND 480' FWL
SECTION 11-T1B5-R30E
EDDY COUNTY, NEW MEXICO

EXHIBIT D

MERIT ENER.
(OPER)

NO BENSON
(ON.) UNIT

SHUGART 18 ON UN.
MEWBOURNE (OPER)

CULWIN (ON.) UNIT