

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT TRIPLICATE*

(Other instructions on
reverse side)

20-015-27160
Form approved.
Budget Bureau No. 1004-0130
Expires August 31, 1993

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER ☐

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Yates Petroleum Corporation

3. ADDRESS OF OPERATOR

105 South Fourth Street, Artesia, New Mexico 88210

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

660' FSL and 1980' FEL
At proposed prod. zone

same

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

Approximately 32 miles southwest of Artesia, New Mexico

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

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

8300'

20. ROTARY OR CABLE TOOLS

Rotary

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

3640' GR

22. APPROX. DATE WORK WILL START*

ASAP

23

PROPOSED CASING AND CEMENTING PROGRAM

Controlled Water Bath

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	9 5/8"	36# J-55	1150'	1150 sacks (Circulated)
8 3/4"	7"	23 - 26#	TD	As warranted SEE STIPS.
		J-55 & 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 to shut off gravel and cavings. If commercial, production casing will be run and cemented, will perforate and stimulate as needed for production.

MUD PROGRAM: FW gel/CLM to 1150'; FW to 5000'; cut Brine to 5200'; SW gel/Starch to TD.

BOP PROGRAM: Bop's and hydril will be installed on 9 5/8" casing and test daily.

Put ID-1
10-16-92
New Loc & API

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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

9-22-92

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

TITLE

DATE

10-7-92

*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 as to any matter within its jurisdiction.

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 IRONWOOD ALW FEDERAL COM			Well No. 1		
Unit Letter 0	Section 25	Township 20 SOUTH	Range 24 EAST	County NMPM EDDY COUNTY, NM				
Actual Footage Location of Well:								
1980 feet from the EAST line and			660 feet from the SOUTH line					
Ground level Elev. 3640.			Producing Formation Cisco Canyon			Pool S. Dagger Draw Upper Penn.		
						Dedicated Acreage: 320 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

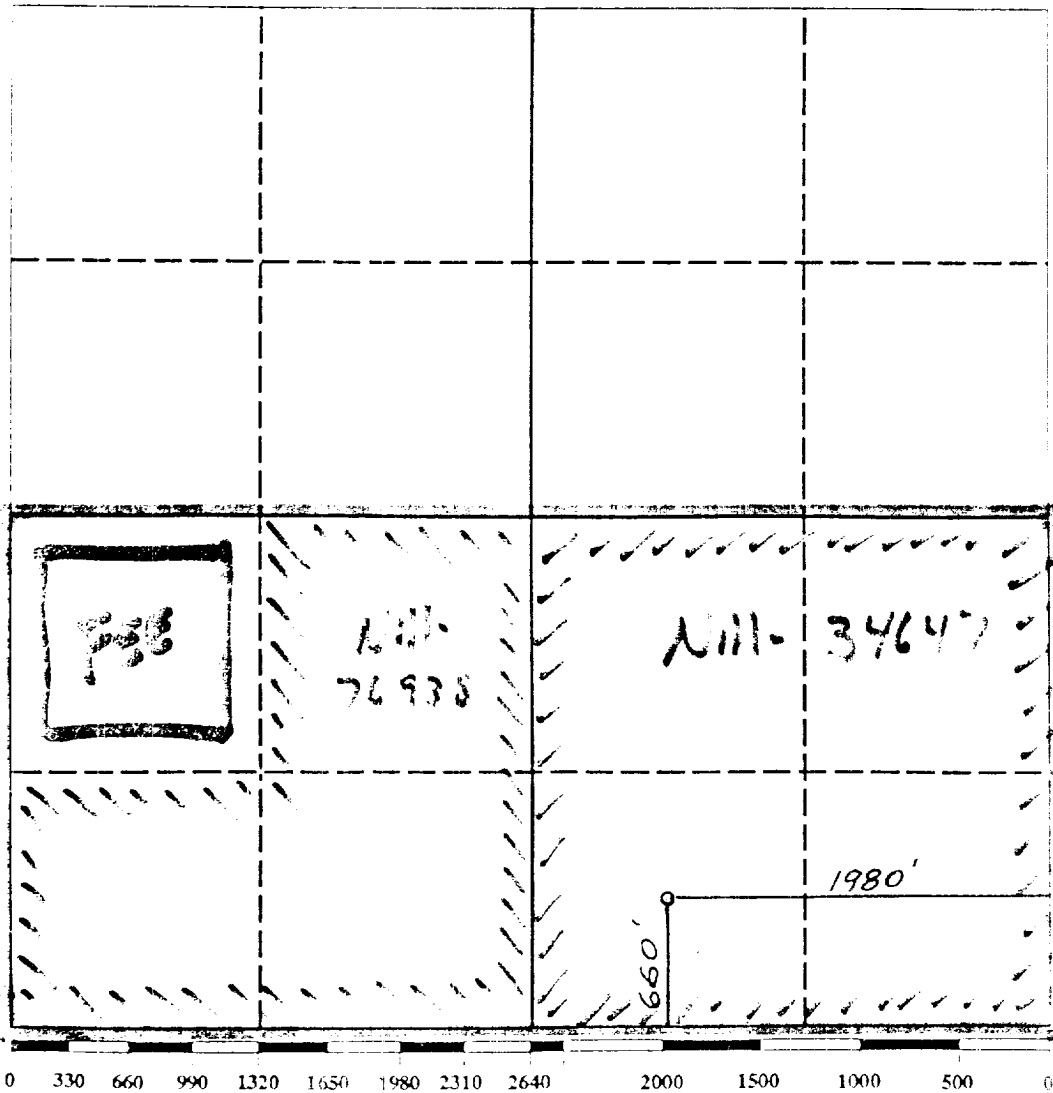
☐ No

If answer is "yes" type of consolidation

Communitization

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, force-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

Printed Name

Position

Company

Date

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

SEPTEMBER 11, 1992

Signature & Seal of Professional Surveyor

Certificate No. 5412

NEW MEXICO

5412

Professional Surveyor

NO. 5412

NEW MEXICO

PROFESSIONAL SURVEYOR

NO. 5412

NEW MEXICO

PROFESSIONAL SURVEYOR

YATES PETROLEUM CORPORATION
Ironwood "ALW" Federal Com #1
660' FSL and 1980' FEL
Section 25-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 7500 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.

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 has 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.

Drilling Plan
YATES PETROLEUM CORPORATION
Ironwood "ALW" Federal Com #1
660' FSL and 1980' FEL
Section 15-T20S-R24E
Eddy County, New Mexico

Anticipated Drilling Time 17 days.

Hole Size: 14 3/4" Depth To: 1150' Casing Size: 9 5/8" Setting Depth: 1150'

Casing Description: 9 5/8", 36#, 8R, J55, ST&C.

Cement Slurry: 700 sx. "Class C Lite" w/1/2# Cellocel, 10# Gilsonite and 3% CaCl₂. Wt 12.7 yield 1.84 + 200 sx. "Class C" and 2% CaCl₂. Wt. 14.8 yield 1.32. Cement circulated to surface.

All casing in New Minimum Design Factors: Collapse 1.125, Burst 1.0, Tensile Str. 1.80.

Hole size: 8 3/4" Depth To: 8300' Casing Size 7" Setting Depth: 8300'

Casing Description: 0 - 600', 7", 26#, N-80, 8R, LT&C, 600' - 3200', 7", 26# J55, 8R, LT&C, 3200' - 6950', 7", 23#, J-55, 8R, LT&C, 6950' - 8200', 7", 26#, J55, 8R, LT&C.

All casing is New Minimum Design Factors: Tensile Strength 1.8, collapse 1.125, Burst 1.0

Cement Slurry: Will be cemented in two stages. Stage Tool set approximately 5500'.

First stage: 500 gals sure bond, 500 gals - WMWI, 700 sx. "Class H" w/5# sack CSE, .659.

CF-14, 1/2# Cellocel & 10# Gilsonite. Wt. 15.1, yield 1.34. Calculated to fill 2700 linear feet.

Second stage: 775 sx "Lite C" w/4% CF-14, 5# sack Salt. Wt. 12.4 yield 1.98. Tail w/100 sx. "H" neat Wt. 15.6. Yield 1.18, circulated to surface.

All casing is New Minimum Design Factors: Collapse 1.125, Burst 1.0, Tensile 1.80.

Anticipated Drilling Mud Program:

From spud to 1150' Minimum Properties: Mud Weight 8.6 - 9.6. Viscosity 32 sec./1000cc. Water loss N/C cc. Mud will be checked tourly by rig personnel. Sufficient quantities of mud will be kept on location to maintain minimum properties.

From 1150' to 4500' Fresh Water. Mud weight 8.4. Viscosity 28 sec./1000 cc mud. Water loss - No control. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on hand to maintain mud properties listed.

From 4500' to 8200' Cut Brine, Mud weight 9.1 - 9.4 ppg. Viscosity 28 sec./1000cc. WL - No control. Mud to be checked tourly by rig personnel. Sufficient quantities of mud on hand to maintain minimum properties listed.

Drilling Plan
Ironwood "ALW" Federal Com #1
Page 2

Anticipated BHP:

From: <u>-0-</u>	TO <u>1150</u>	Anticipated Max. BHP: <u>500</u> PSI
From: <u>1150</u>	TO <u>8200</u>	Anticipated Max. BHP: <u>2500</u> PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: Spud - 1150'.

H2S Zones Anticipated: H2S present in Canyon formation. Mud hydrastatic suppresses H2S during drilling.

Maximum Bottom Hole Temperature: 145 F

YATES PETROLEUM CORPORATION

Ironwood "ALW" Federal Com #1
660' FSL and 1980' FEL
Section 25-T20S-R24E
Eddy County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Yates Petroleum Corporation submits the following ten items of pertinent information in accordance with BLM requirements

1. The geological surface formation is Alluvium:
2. The estimated tops of geologic markers are as follows:

San Andres	690'
Glorieta	2,291'
Bone Spring Lime	3,617'
3rd Bone Spring Sand	5,969'
Abo Green Shale	6,143'
Wolfcamp Lime	6,263'
Canyon Lime	7,623'
Canyon Dolomite	7,700'
Base Canyon Dolomite	7,870'
TD	8,300'
3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water:	Approximately 250'
Oil or Gas:	Wolfcamp, Canyon
4. Proposed Casing Program: See Form 3160-3.
5. Pressure Control Equipment: See Form 3160-3 and Exhibit B.
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Kelly Cock; pit level indicators and flow sensor equipment - sub with full-opening valve on floor, drill pipe connections.
8. Testing, Logging and Coring Program:

Samples: 10' samples from 500' to TD.

DST's: As warranted by drilling breaks and shows.

Logging: CNL-LDT from TD to casing, with GR-CNL up to surface;
DLL (with minimum RxO) from TD to casing.
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: As soon as possible after approval.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Petroleum Corporation
Ironwood "ALW" Federal Com #1
660' FSL and 1980' FEL
Section 15-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 BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 32 miles southwest of Artesia, New Mexico, and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

1. Go south of Artesia on Highway 285 for approximately 15 miles to Rock Daisy Road.
2. Turn west and go approximately 8.2 miles to Sawbucks Road.
3. Turn south approximately 3.4 miles to Pickett Road.
4. Turn east and go approximately 1 mile.
5. Turn south on lease road for approximately 1.5 miles.
6. Turn east to Conoco "AGK" Fed #3 location and on to the Dahlia #1 location and battery.
7. New road starts here.

2 **PLANNED ACCESS ROAD**

- A. The proposed new access will be approximately 1,000' in length from point of origin to the southwest 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 turnout will be built.
- D. The route of the road is visible.

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 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:

Private located in Section 22-T20S-R24E.

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:

- A. A 3" steel buried flowline to the Dahlia Battery, approximately ~~4~~¹⁴200' in length, 30' wide right-of-way. (On Flat).
- B. A 3 phase, 480 volt, raptor proof power line, 25' wide and approximately 1400' in length right-of-way. (On Flat).

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. A cross section of a drill pad with approximate cuts, fills and pad orientation is shown on Exhibit E.
- 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 levelled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the BLM 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: BLM (Carlsbad, NM)

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:

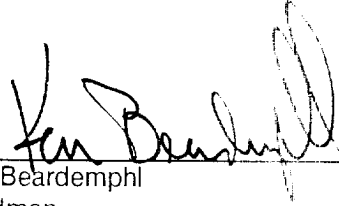
Mike Slater, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. CERTIFICATION:

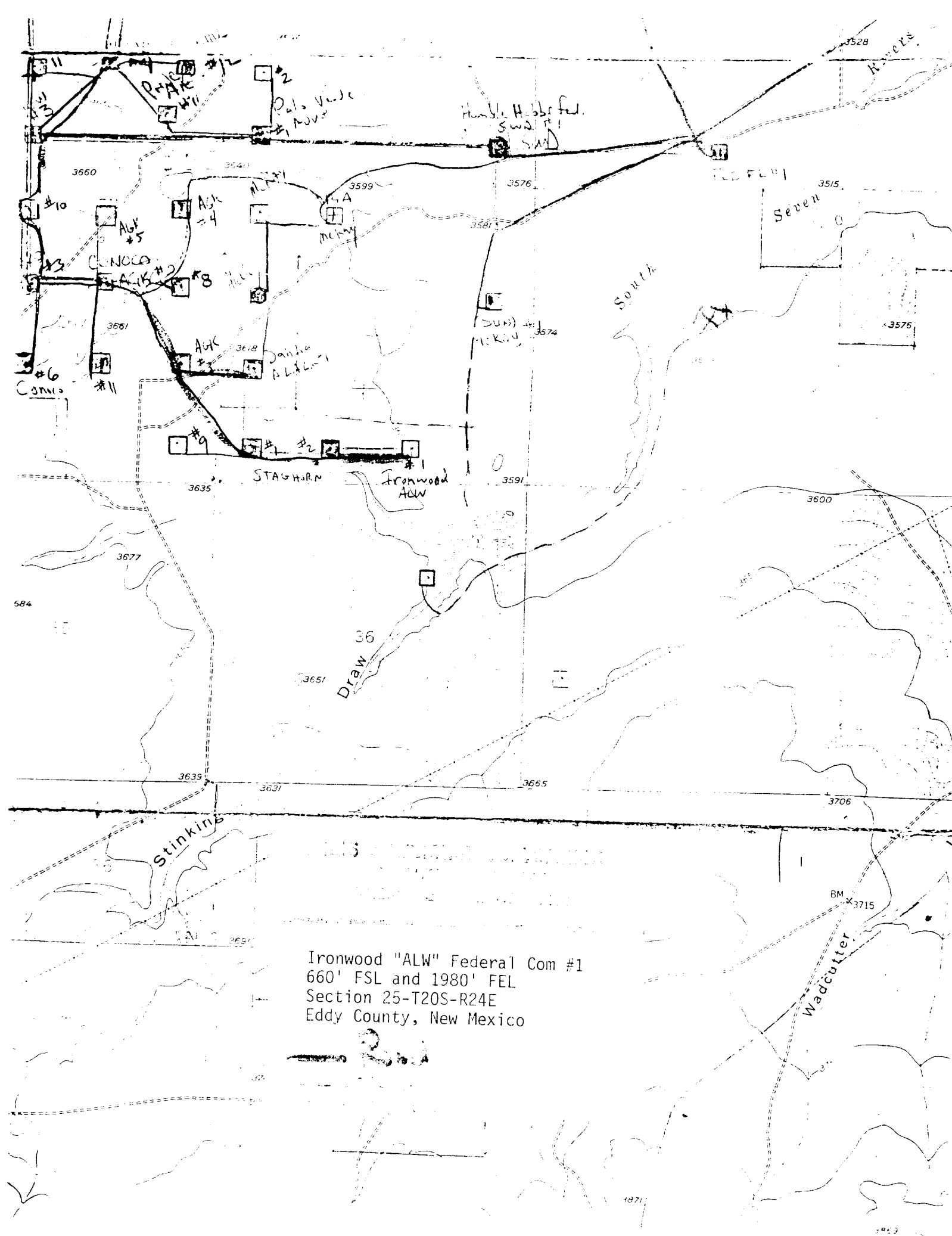
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and , that the work associated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

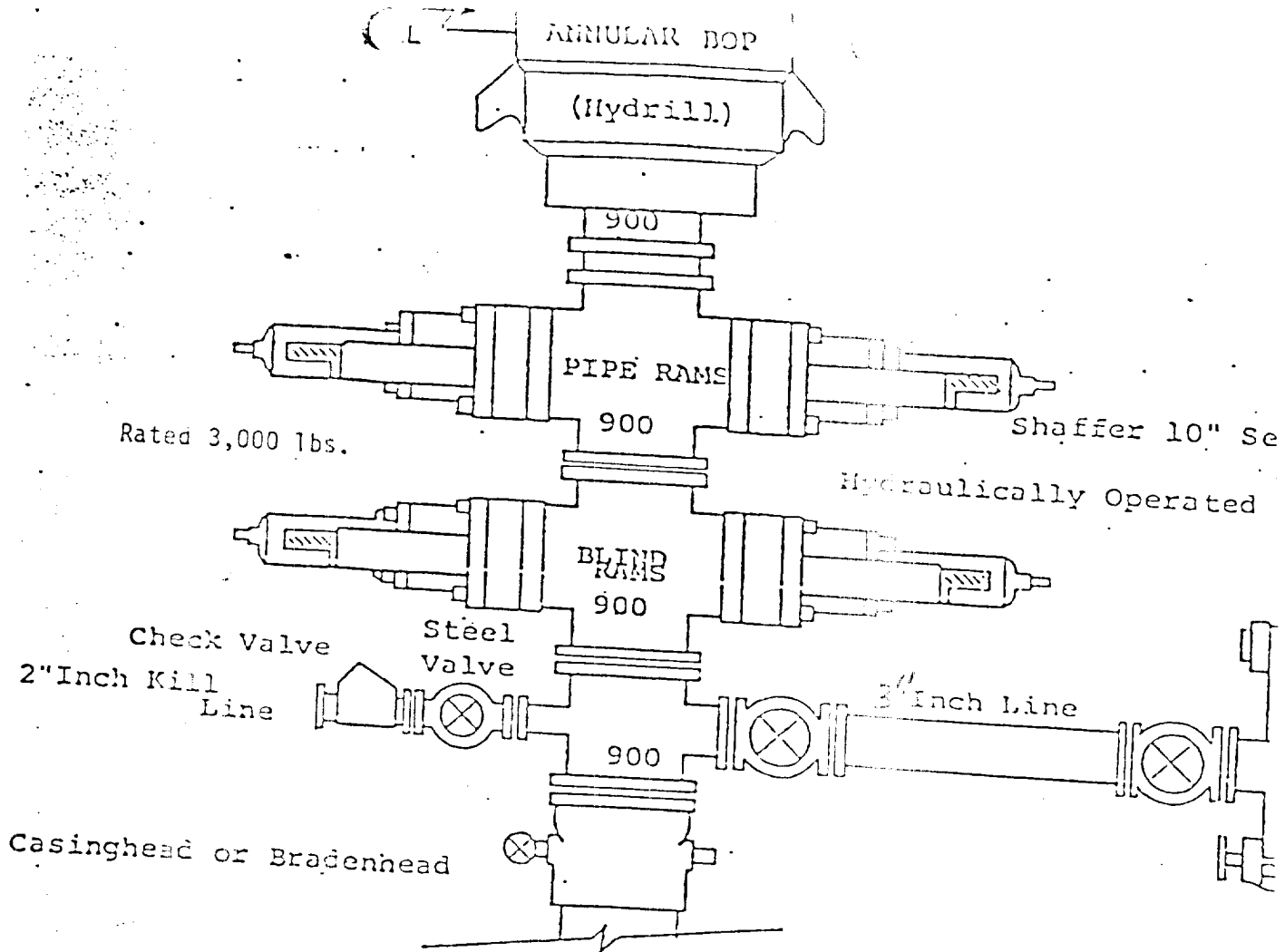
9-22-92

Date



Ken Beardemphl
Landman





THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1. All preventers to be hydraulically operated with secondary manual 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 2" minimum diameter.
4. All connections from operating manifolds to preventers to be all hole or tube a minimum of one inch in diameter.
5. The available closing pressure shall be at least 15% in excess of required with sufficient volume to operate the B.O.P.'s.
6. All connections to and from preventer to have a pressure rating to that of the B.O.P.'s.
7. Inside blowout preventer to be available on rig floor.
8. Operating controls located a safe distance from the rig floor.
9. Hole must be kept filled on trips below intermediate casing.

EXHIBIT
B

YATES PETROLEUM CORPORATION

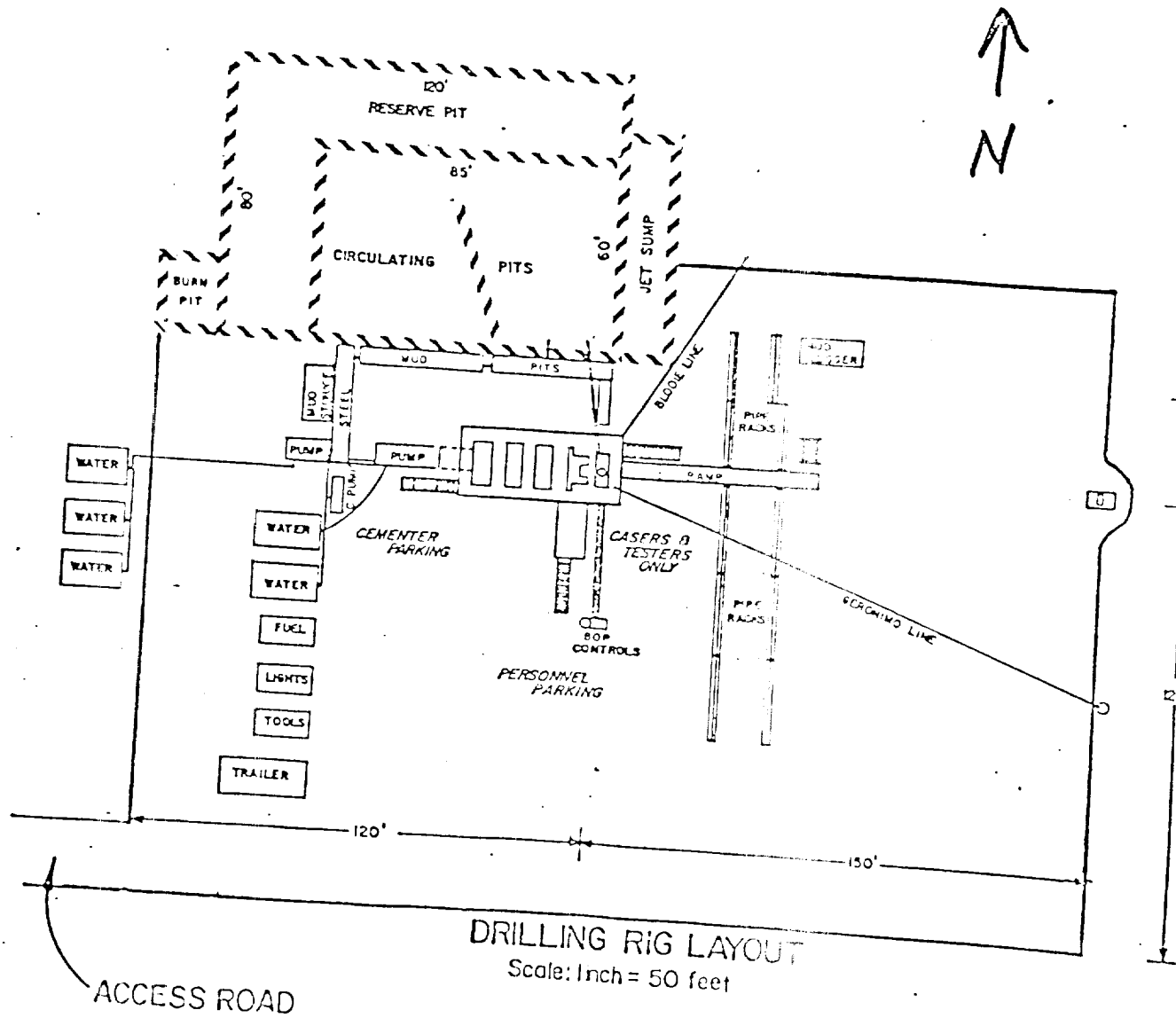
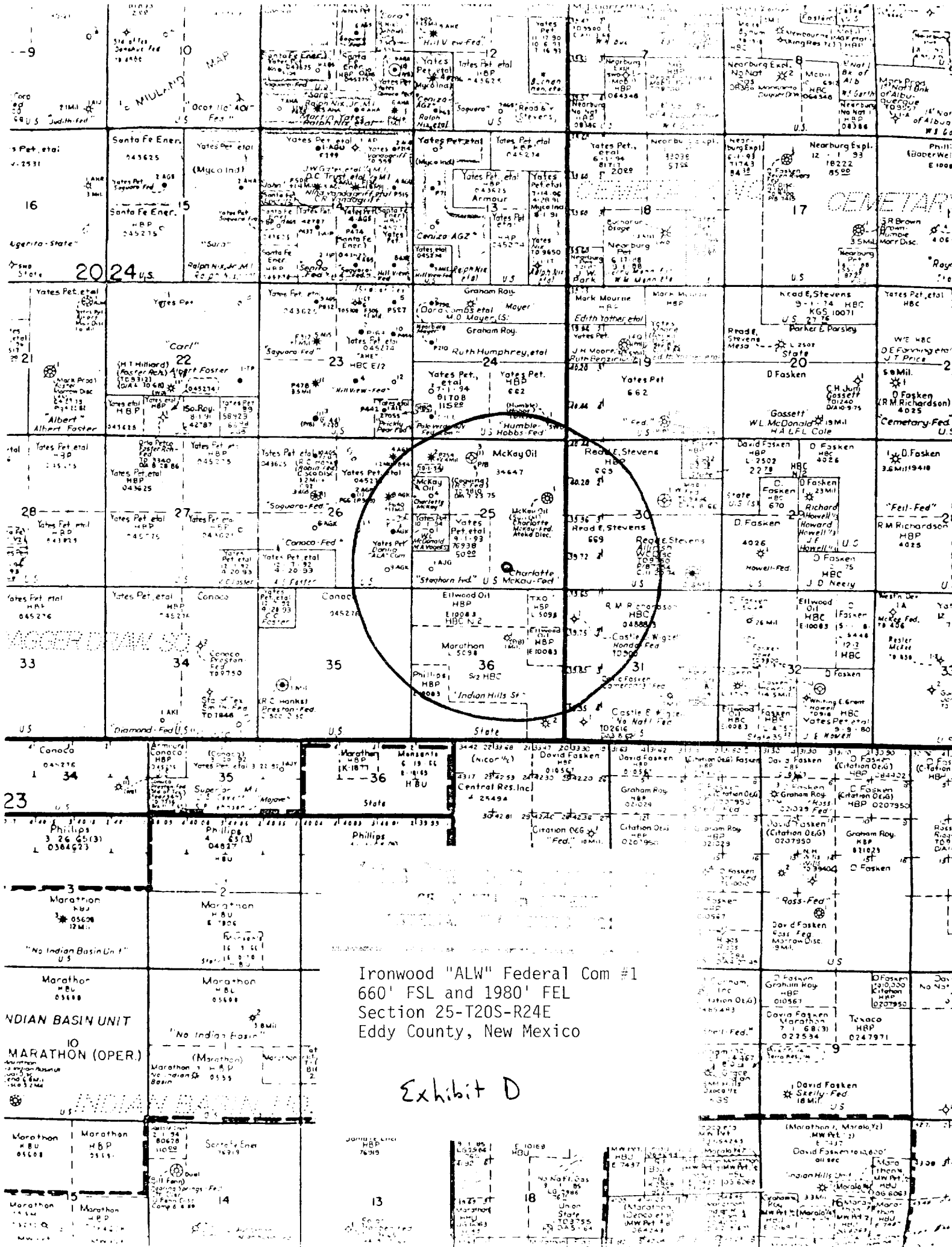


EXHIBIT C



Ironwood "ALW" Federal Com #1
660' FSL and 1980' FEL
Section 25-T20S-R24E
Eddy County, New Mexico

Exhibit D