

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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.)\*

At surface

1980' FSL and 990' FEL; Unit Letter I  
At proposed prod. zone

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

Approximately 22 miles northeast of Roswell, New Mexico

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

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

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

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

19. PROPOSED DEPTH

4000'

20. ROTARY OR CABLE TOOLS

Rotary

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

3623' GR

22. APPROX. DATE WORK WILL START\*

ASAP

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.50#	850'	800 sacks - Circulate
12 1/4"	* 8 5/8"	24.0 #	1450'	550 sacks - Tie Back
7 7/8"	4 1/2"	9.5 #	4000'	575 sacks

\* 8 5/8" casing to be set if lost circulation is encountered. If lost circulation is not encountered, the hole will be reduced to 7 7/8" at 1450'.

Yates Petroleum Corporation proposes to drill and test the Abo and Intermediate formations. Approximately 850' of surface casing will be set and cement circulated to shut off gravel and cavings. If needed due to lost circulation, 8 5/8" intermediate casing will be run to 1450' and cemented to tie-back to the surface casing. If commercial, production casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: Spud mud to 850'; FW gel/LCM to 1450'; cut Brine to 3400'; SW gel, Starch, and diesel to TD.

BOPE PROGRAM: BOPE will be installed on the 13 3/8" casing and tested daily.

GAS NOT DEDICATED

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

Clifton R. May

TITLE

Permit Agent

DATE

11-19-92

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

David Stout

TITLE

Asst. Area Manager

DATE

12/18/92

CONDITIONS OF APPROVAL, IF ANY:

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT IN ADVANCE.

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD BE NECESSARY FOR THE APPLICANT TO CONDUCT OPERATIONS THEREON.

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

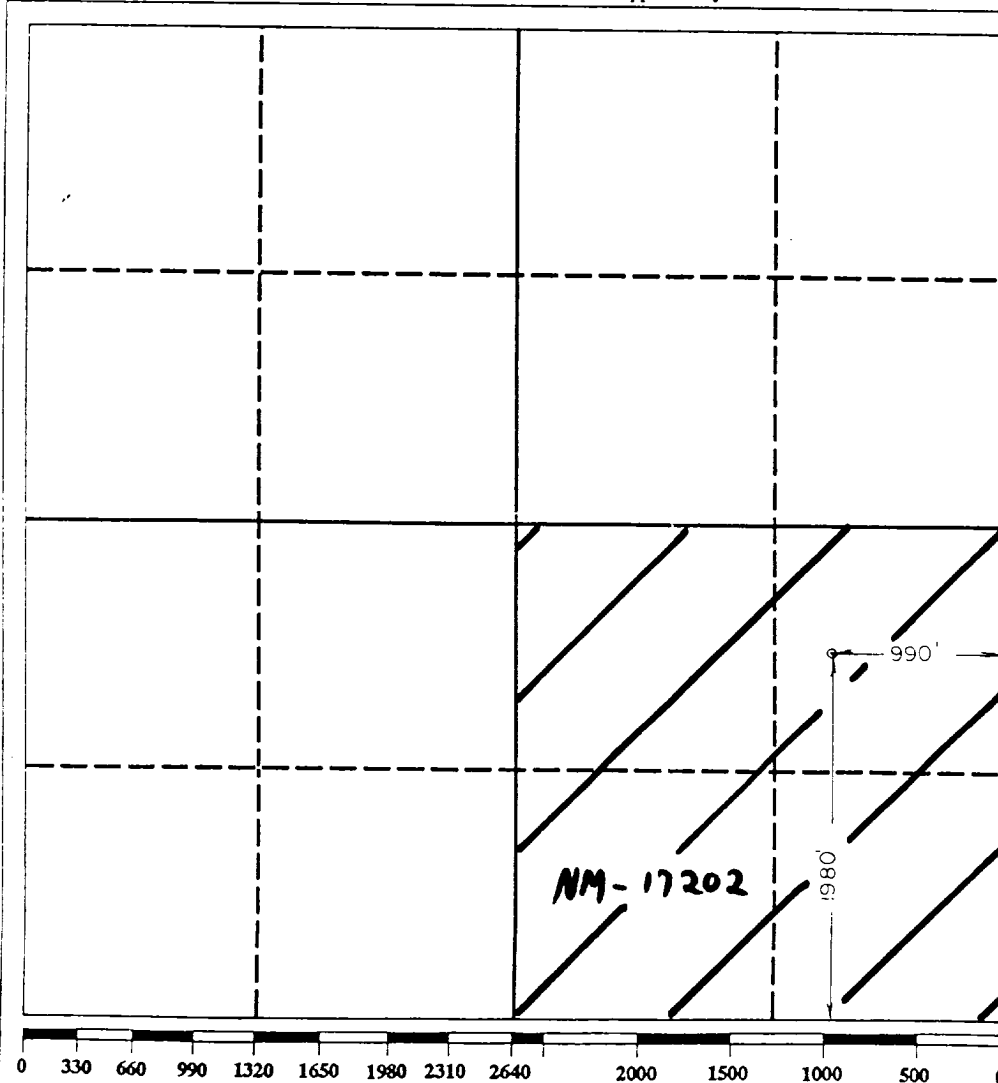
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator YATES PETROLEUM CORPORATION			Lease SHORT "RM" FEDERAL		Well No. 5
Unit Letter I	Section 25	Township 7 SOUTH	Range 25 EAST	County CHAVES	
Actual Footage Location of Well: 990 feet from the EAST line and 1980 feet from the SOUTH line					
Ground level Elev. 3623	Producing Formation Abo		Pool PECOS SLOPE ABO	Dedicated Acreage: 160 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 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: *Clifton R. May*  
Printed Name: Clifton R. May  
Position: Permit Agent  
Company: Yates Petroleum Corporation  
Date: November 19, 1992

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: 11/11/92  
Signature & Seal of Professional Surveyor

*[Signature]*  
Certificate No. 3640

**YATES PETROLEUM CORPORATION**  
**Short RM Federal #5**  
**1980' FSL and 990' FEL**  
**Section 25-T7S-R25E**  
**Chaves County, New Mexico**  
**DRILLING PROGNOSIS**

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

San Andres	397'
Glorieta	1,447'
Fullerton	2,838'
Abo	3,549'
TD	4,000'

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS, OR MINERAL FORMATIONS:

Water:	250' - 300'
Gas:	3549'

3: PRESSURE CONTROL EQUIPMENT - (Schematic Attached)

A. The Blow-Out Preventor will be equipped as follows:

1. One (1) blind ram (above)
2. One (1) pipe ram (below)
3. Kill line (2-inch minimum)
4. One (1) kill line valve (2-inch minimum)
5. One (1) choke line valve
6. Two (2) adjustable chokes.
7. Upper kelly cock valve with handle available
8. Safety valves & subs to fill all drill strings in use
9. 2-inch (minimum) choke line
10. Fill-up line above the upper most preventor

B. Pressure Rating: 2,000 PSI

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#	J-55	8RD	ST&C	0 - 850'	850'
*12 1/4"	8 5/8"	24#	J-55	8RD	ST&C	0 - 1450'	1450'
7 7/8"	4 1/2"	9.5#	J-55	8RD	ST&C	0 - 4000'	4000'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.8
- \*2. 8 5/8" casing to be set if lost circulation is encountered. If lost circulation is not encountered, the hole will be reduced to 7 7/8" at 1450'.
3. Yates Petroleum Corporation requests that a variance be granted in requiring the casing to be tested to 1500 PSI to testing the casing to 1000 PSI. The rig pumps will be used to test the casing. Rig pumps used in this area cannot safely test above 1000 PSI. We would have to go to the greater expense of hiring an independent service to do the testing. Also, the maximum shut-in bottom hole pressure is 1100 PSI. Pressure at the surface is much less. Most of the time the Abo formation requires treatment before it flows.



## B. CEMENTING PROGRAM:

Surface Casing: Set with 500 sx HL "C" + 1/2#/sx Flocele + 3#/sx granulite + 3% CaCl<sub>2</sub> with weight of 12.7 ppg and Yield 1.84 cu.ft./sx. Tail in 200 sx "Neat" with 2% CaCl<sub>2</sub> with weight of 14.8 ppg and yield 1.32 cu.ft./sx, circulated to surface.

\*Intermediate Casing: If needed will be set with 350 sx HL with 3% CaCl<sub>2</sub>, 3#/sx Granulite + 1/3#/sx flocele with weight of 12.8 ppg and yield 1.84 cu.ft./sx with top of cement being approximately 1200'. Tailed in with 200 sacks "C" + 2% CaCl<sub>2</sub> with weight of 14.8 and yield 1.32.

Production Casing: Set with 575 sx 65/35 Poz "C" with 2% Gel + .6% Halad - 332 + 2#/sx salt with weight of 14.0 ppg and yield 1.6 cu.ft./sx with cement top being approximately 3100'.

A greater amount of cement will be used if necessary to ensure that all potentially productive hydrocarbon zones are cemented off. Fill-up to be determined from logs.

## 5. MUD PROGRAM:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0 - 850'	Spud Mud			
850' - 1450'	FW Gel/LCM	8.6-9.9	32-40	N/C
1450' - 3400'	Cut Brine	9.9	28	
TD	S.Gel/Starch & Diesel	9.3	31-39	15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

## 6. EVALUATION PROGRAM:

Samples: Every 10' out from under surface casing.

Logging: CNL/LDT - TD to casing w/GR/CNL to surface; DLL w/RXO - TD to casing.

Coring: None Anticipated.

DST's: Any tests will be based on the recommendation of the well site geologist as warranted by breaks and shows.

## 7. ABNORMAL CONDITIONS

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been reported or is known to exist from previous drilling in this area at this depth.

## 8. ANTICIPATED STARTING DATES

Plans are to drill this well before the end of the year. It should take approximately 15 days to drill the well with completion taking another 15 days.



## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation

Short RM Federal #5

1980' FSL and 990' FEL

Section 25-T7S-R25E

Chaves 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 well site is located approximately 21 miles northeast of Roswell, New Mexico, and the access route to the location is indicated in red and green on Exhibit A.

### DIRECTIONS:

Go north of Roswell on Highway 285 for approximately 13 miles to One Horse Road. Turn right and follow road 2.6 miles to Cottonwood road. Go left on Cottonwood for 9.2 miles to Chaves Road. Go right for 2.6 miles and new access will start here and go to the southwest corner of the pad.

### 2. PLANNED ACCESS ROAD

- A. The proposed new access will be approximately 1800' in length from point of origin to the southwest edge of the drilling pad. The road will lie in a northerly 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 side. No 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 well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

### 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. A local water trucking firm will be contracted to furnish the water. They will provide the water obtaining it from whatever sources available to them at their discretion. It will be trucked to the location over the existing and proposed roads shown in Exhibit A. A probable source is ~~Cooper #2 located in Section 6-T6S-R26E.~~

Jack Water Station - Sec. 31-T5S-R24E  
Permit # RA 3378





6. SOURCE OF CONSTRUCTION MATERIALS:

- A. The dirt contractor will come up with a pit to use for construction of the road and pad. A probable pit is a private pit located in the S/2 of Section 30-T6S-R26E.

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. Yates Petroleum Corporation wishes to apply for an off-lease Right-of-Way for a 3" OD Steel, X-42, buried pipeline. Approximately 100 MCF per day volume with approximately 200 PSI working pressure. The route will follow the access road to and across Chaves Road and then northeast to the southeast corner of Coffman #2 pad in the NENE of Section 25-T7S-R25E. The length will be about 2100'. See Exhibit A.

9. WELL SITE 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 well site 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 when dry.

11. SURFACE OWNERSHIP: Federal surface administered by the BLM.

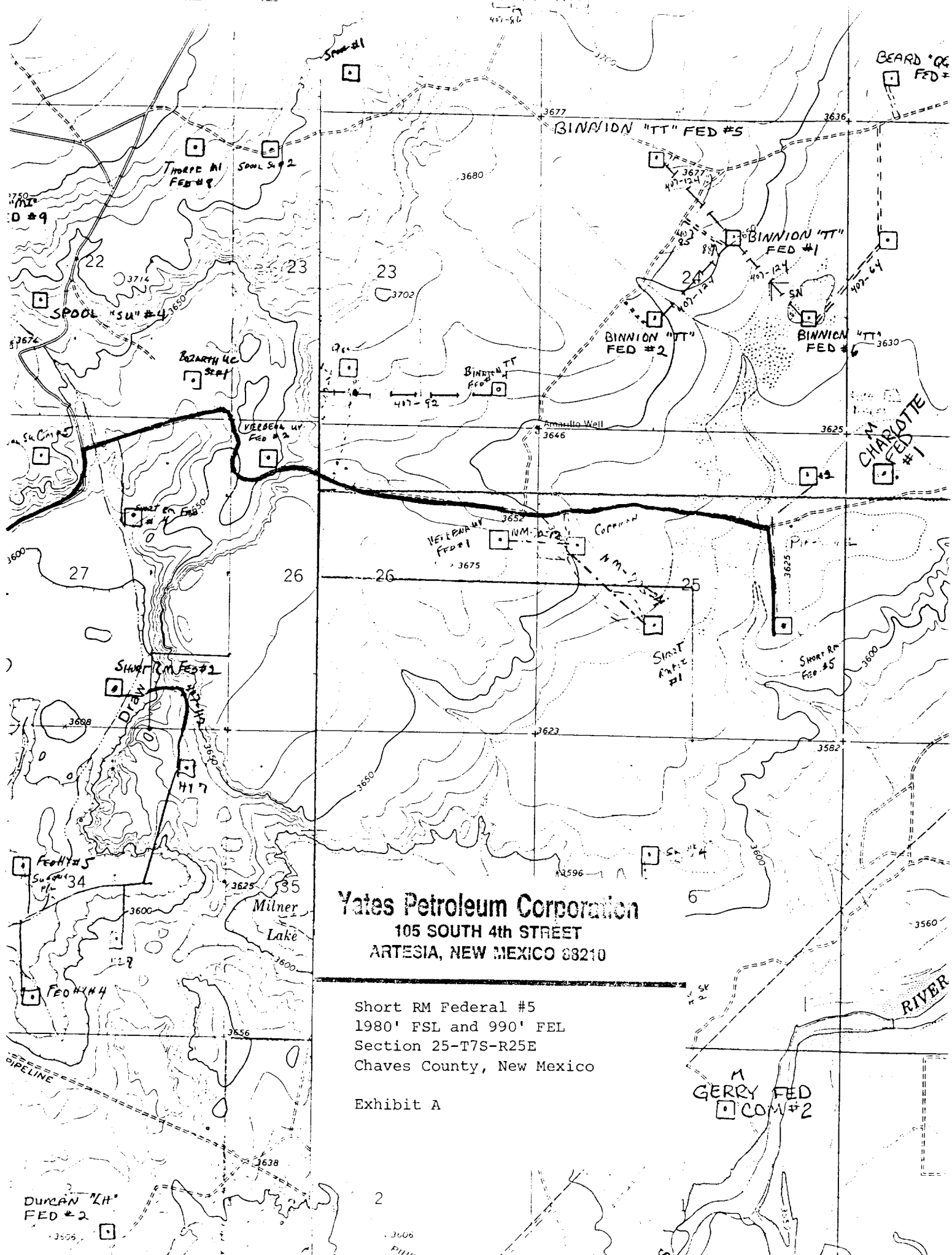
12. OTHER INFORMATION:

- 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.

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

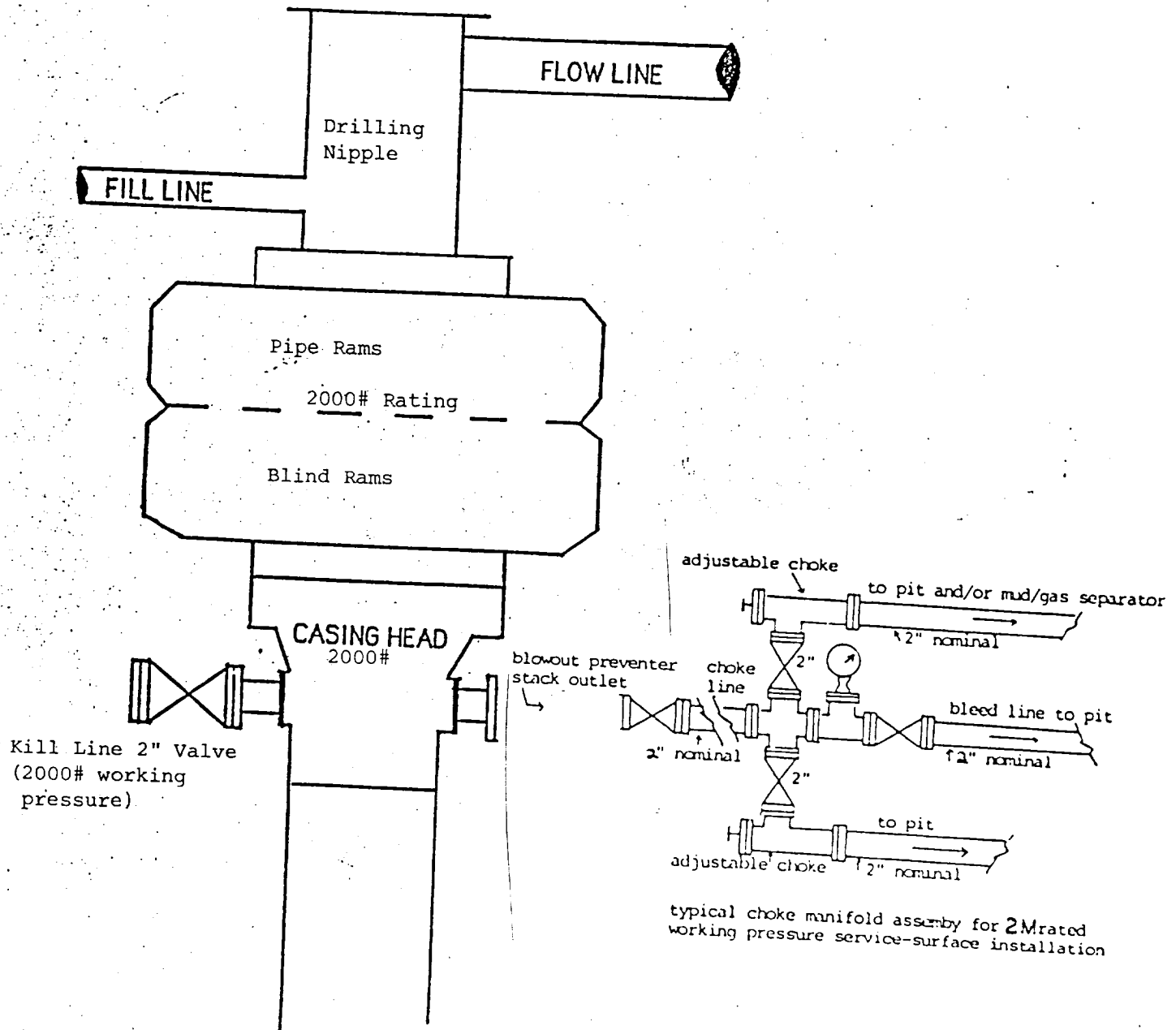
Short RM Federal #5  
1980' FSL and 990' FEL  
Section 25-T7S-R25E  
Chaves County, New Mexico

Exhibit A





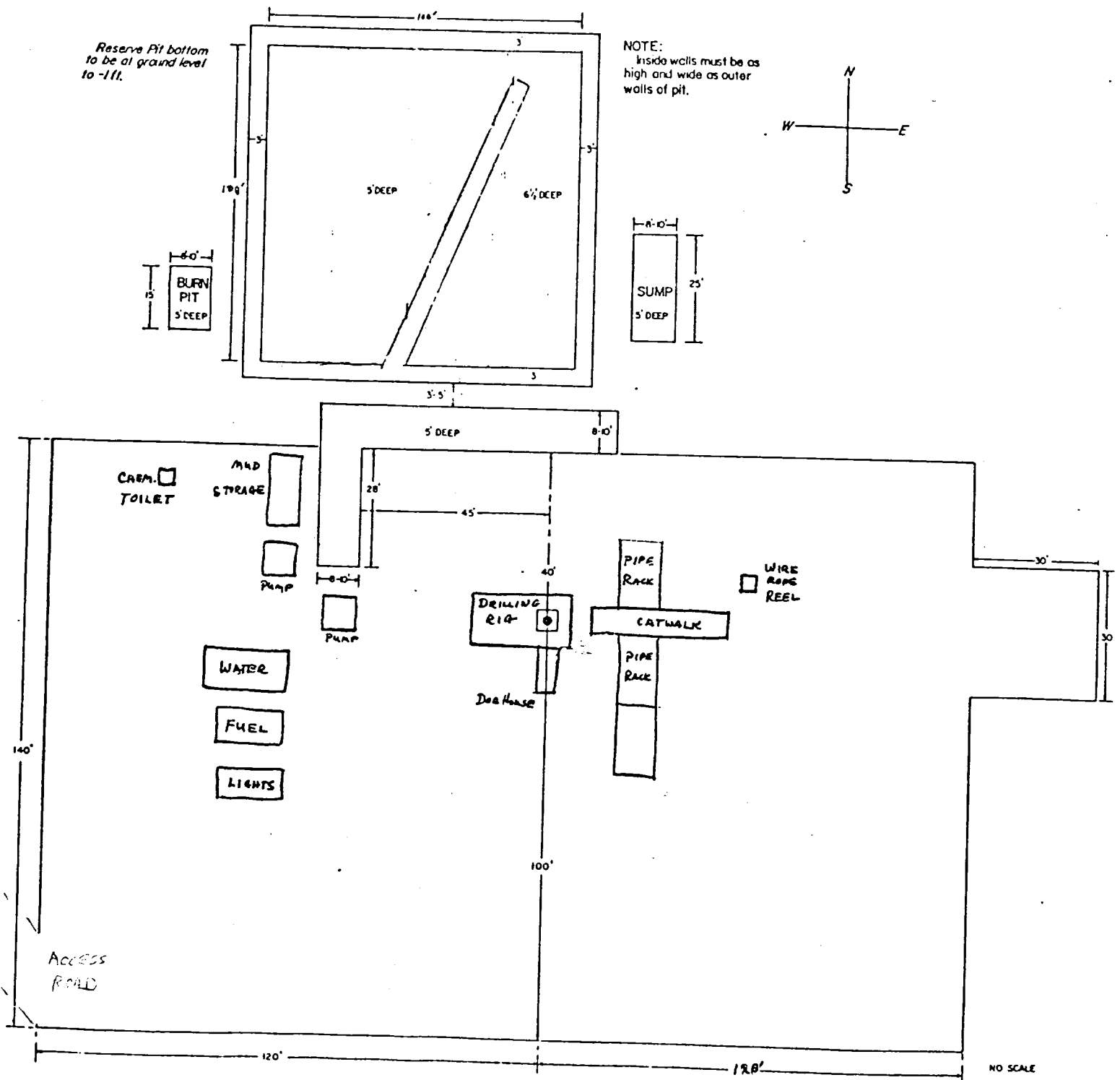
# YATES PETROLEUM CORPORATION



**BLOWOUT PREVENTER  
2M SYSTEM**



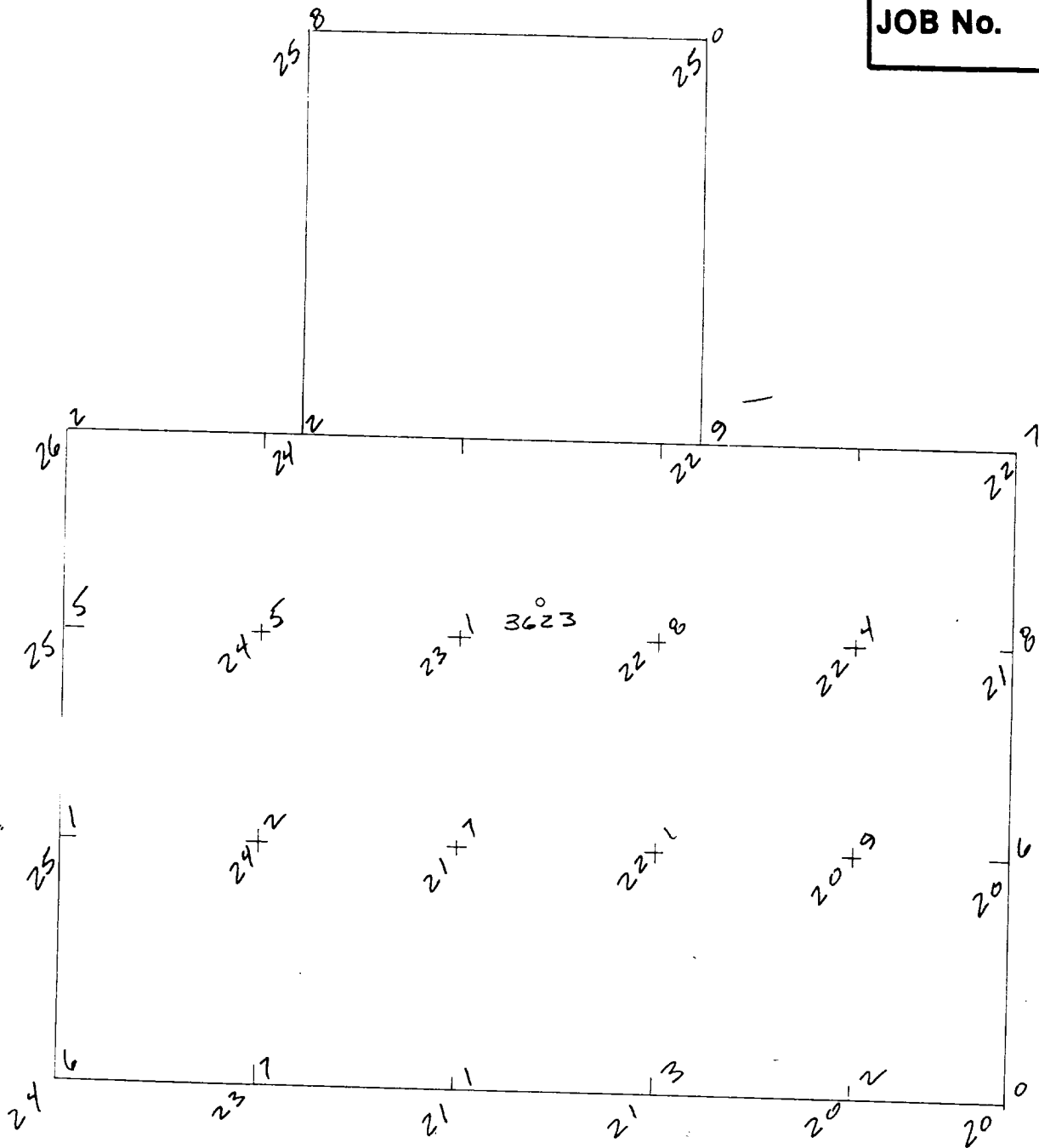
EXHIBIT C







JOB No.



HIGH POINT: NW COR. PAD 3626.2  
LOW POINT: SE COR. PAD 3620.0

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

Short RM Federal #5  
1980' FSL and 990' FEL  
Section 25-T7S-R25E  
Chaves County, New Mexico

Exhibit D

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY  
DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY

