

OCD-ARTESIA
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM100831
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator YATES PETROLEUM CORPORATION		7. If Unit or CA Agreement, Name and No. 23846
3a. Address 105 S 4TH STREET ARTESIA, NM 88210		8. Lease Name and Well No. BAT ARO FEDERAL 2
3b. Phone No. (include area code) Ph: 505.768.4364 Fx: 505.748.4572		9. API Well No. 30-015-32581
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NESE 1400FSL 1170FEL At proposed prod. zone SWSW 1C00FSL 660FWL		10. Field and Pool, or Exploratory UNKNOWN
14. Distance in miles and direction from nearest town or post office* APPROX. 24 MILES SW FROM CARLSBAD, NM		11. Sec., T., R., M., or Bk. and Survey or Area Sec 33 T23S R24E Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1170	16. No. of Acres in Lease 640.00	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1/2 MILE	19. Proposed Depth 10400 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4242 GL	22. Approximate date work will start	17. Spacing Unit dedicated to this well 320.00
23. Estimated duration 30		20. BLM/BIA Bond No. on file

24. Attachments

SUBJECT TO LIKE APPROVAL BY STATE

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) CY COWAN Ph: 505.748.4372	Date 11/21/2002
Title REGULATORY AGENT		
Approved by (Signature) /S/ JOE G. LARA	Name (Printed/Typed) /S/ JOE G. LARA	Date JAN 10 2003
Title FIELD MANAGER		

Application approval does not warrant or certify 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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

Additional Operator Remarks (see next page)

Electronic Submission #16233 verified by the BLM Well Information System
For YATES PETROLEUM CORPORATION
Committed to AFMSS for processing by Linda Askwig on 11/21/2002 (03EA0442AE)

Not to be Connected to Air Basin

ATTACHED TO THE PERMIT AND
STAKE REGULATIONS

Additional Operator Remarks:

NO REMARK PROVIDED

District I
1625 N. French Dr. Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, N M 87505

Revised March 17, 1999
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name Crooked Creek Morrow	
Property Code	Property Name BAT "ARO" FEDERAL			Well Number 2
OGRID No. 025575	Operation Name YATES PETROLEUM CORPORATION			Elevation 4242

Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
I	32	23-S	24-E		1400	SOUTH	1170	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
M	33	23-S	24-E		1000	SOUTH	660	WEST	EDDY
Dedicated Acres 320 S/2		Joint or Infill	Consolidation Code	Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>EAST 1/2 SEC. 32</p> <p>WEST 1/2 SEC. 33</p> <p>NM-100831</p> <p>SURFACE LOCATION 1170'</p> <p>BOTTOM HOLE LOCATION 660'</p> <p>1400'</p> <p>1000'</p>		<p>OPERATOR CERTIFICATION</p> <p>I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.</p>	
		<p>Signature: <i>Cy Cowan</i></p>	
		<p>Printed Name: Cy Cowan</p>	
		<p>Title: Regulatory Agent</p>	
<p>Date: November 19, 2002</p>		<p>SURVEYOR CERTIFICATION</p> <p>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.</p>	
<p>NOVEMBER 7, 2002</p> <p>Date of Survey</p>		<p>Signature and Seal of Professional Surveyor</p> <p><i>[Signature]</i></p> <p>NEW MEXICO</p> <p>5412</p> <p>REGISTERED PROFESSIONAL ENGINEER</p> <p>NM PE&PS #5412</p> <p>Certification Number</p>	

YATES PETROLEUM CORPORATION
Bat "ARO" Federal #2
 1400' FSL & 1170' FEL Surface Location
 Sec. 32-T23S-R24E
 1000' FSL & 660' FWL Bottom Hole Location
 Sec. 33-T23S-R24E
 Eddy County, New Mexico

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

San Andres	1096'	Cisco	8412'
Cherry Canyon	1828'	Strawn	8985'
Brushy Canyon	1942'	Atoka	9288'
1 st Bone Spring	4502'	Morrow	9975'
2 nd Bone Spring	7456'	Lower Morrow	10161'
Wolfcamp	7692'	Base Morrow Clastics	10305'
		TD	10400'

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

Water: Approx 200' - 300'
 Oil or Gas: All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 5000 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>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	ST&C	0-400'	400'
12 1/4"	8 5/8"	24#	J-55	ST&C	0-2100'	2100'
7 7/8"	5 1/2"	17#	L-80	LT&C	0-600'	600'
7 7/8"	5 1/2"	17#	J-55	LT&C	600'-1700'	1100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	1700'-6200'	4500'
7 7/8"	5 1/2"	17#	J-55	LT&C	6200'-8000'	1800'
7 7/8"	5 1/2"	17#	L-80	LT&C	8000'-10400'	2400'

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

B. CEMENTING PROGRAM:

Surface casing: 300 sx Class C + 2% CaCl₂ (Yld 1.32 Wt.14.8)

Intermediate casing: 700 sx Lite (Yld 2.0 Wt 12.5) Tail in w/200 sx Class C + 2% CaCl₂ (Yld 1.32 Wt 14.8)

Production Casing: TOC 8200'. Nitrified Mud ahead, Lead w/1150 sx Lite (Yld 2.0 Wt. 12.0). Tail in w/550 sx super 'C' modified. (Yld 1.67 Wt 13.0).

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
Spud to 2100'	FW Gel/Paper	8.4-8.8	32-40	N/C
2100'-9400'	Cut Brine	8.6-9.6	28	N/C
9400'-10400'	Salt Gel/KCL/Starch	9.6-10.0	32-38	<10cc

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 intermediate casing.

Logging: Platform Express/HALS/Sonic

Coring: Possible FMI and Rotary sidewall cores.

DST's: As warranted.

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

Anticipated BHP:

From: 0	TO: 400'	Anticipated Max. BHP:	175 PSI
From: 400'	TO: 2100'	Anticipated Max. BHP:	1100 PSI
From: 2100'	TO: 10400'	Anticipated Max. BHP:	5400 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 176° F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 10 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Yates Petroleum Corporation

Bat "ARO" Federal #2

1400' FSL & 1170' FEL Surface Location

Sec. 32-T23S-R24E

1000' FSL & 660' FWL Bottom Hole Location

Sec. 33-T23S-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 24 miles southwest of Carlsbad, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

From the corner of Hwy 285 and Dark Canyon, turn right on Dark Canyon Road and go approximately 14.2 miles, turn left on caliche road that has two well signs, one of them is Mewbourne. Follow existing road south for approx. 1.5 miles. At this point a two track will fork off to the right approx. 0.2 of a mile to a cattle guard and a windmill. Continue on lease road up to the top of hill to the Lechuguilla Canyon Federal #7 well location. The new access will start here from the south side of the pad following an existing two-track road going back to the west for approx. 0.7 of a mile. The new access road will turn north here and go approx. 0.8 of a mile to the southwest corner of the well location. This well will be a directional drill from the Samuel Smith "BAS" State #1 pad.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately 1.5 miles in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a west then north 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. Traffic turnouts may 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.

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:

Dirt contractor will locate closest pit and obtain any permits and materials needed for construction.

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 landfill. 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.

Bat "ARO" Federal #2
Page 3

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:
- B. Through Drilling Operations, Completions and Production:

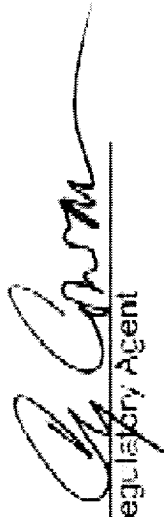
Cy Cowan, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

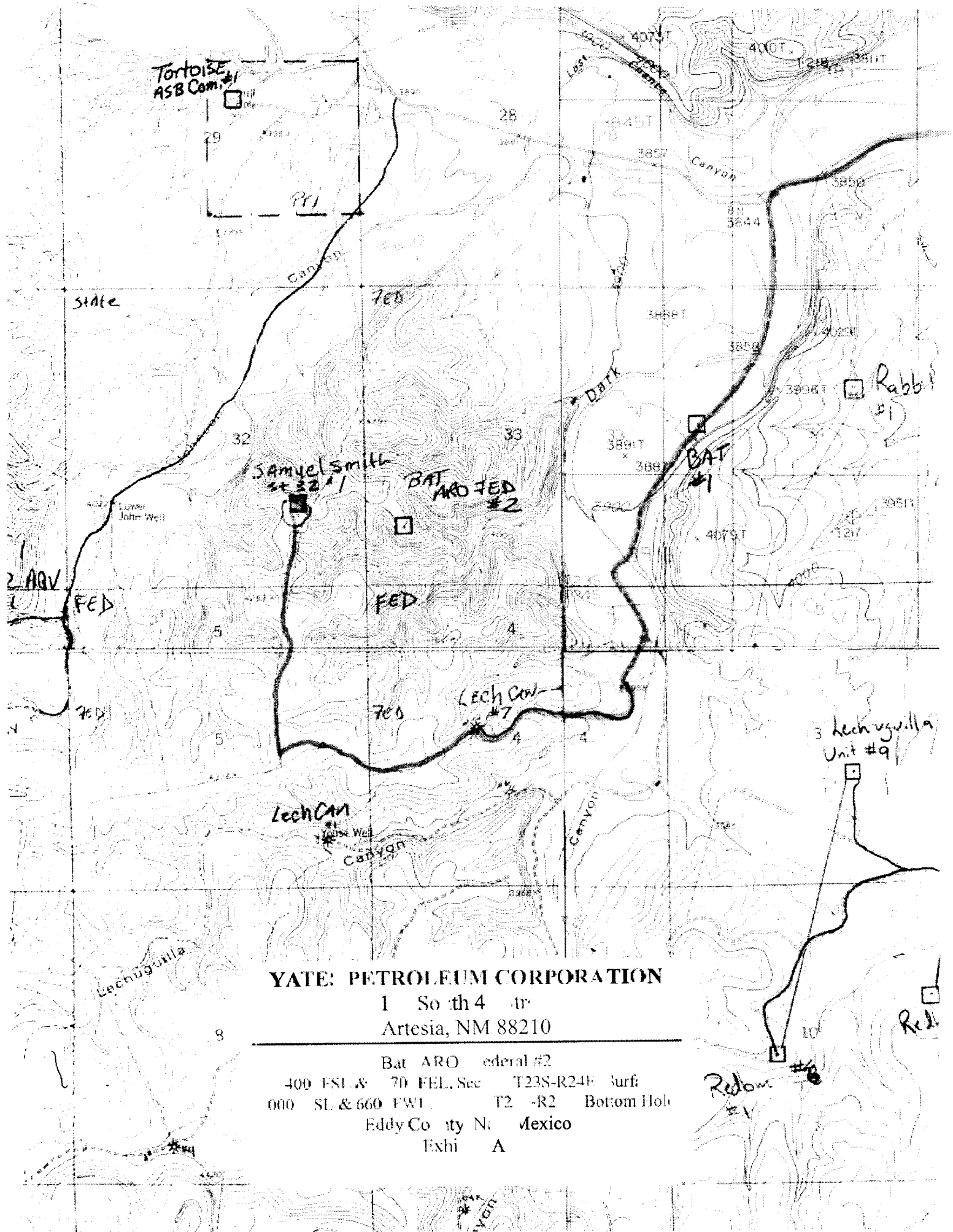
Pinson McWhorter,
Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

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.

11/20/2002


Regulatory Agent



YATE: PETROLEUM CORPORATION

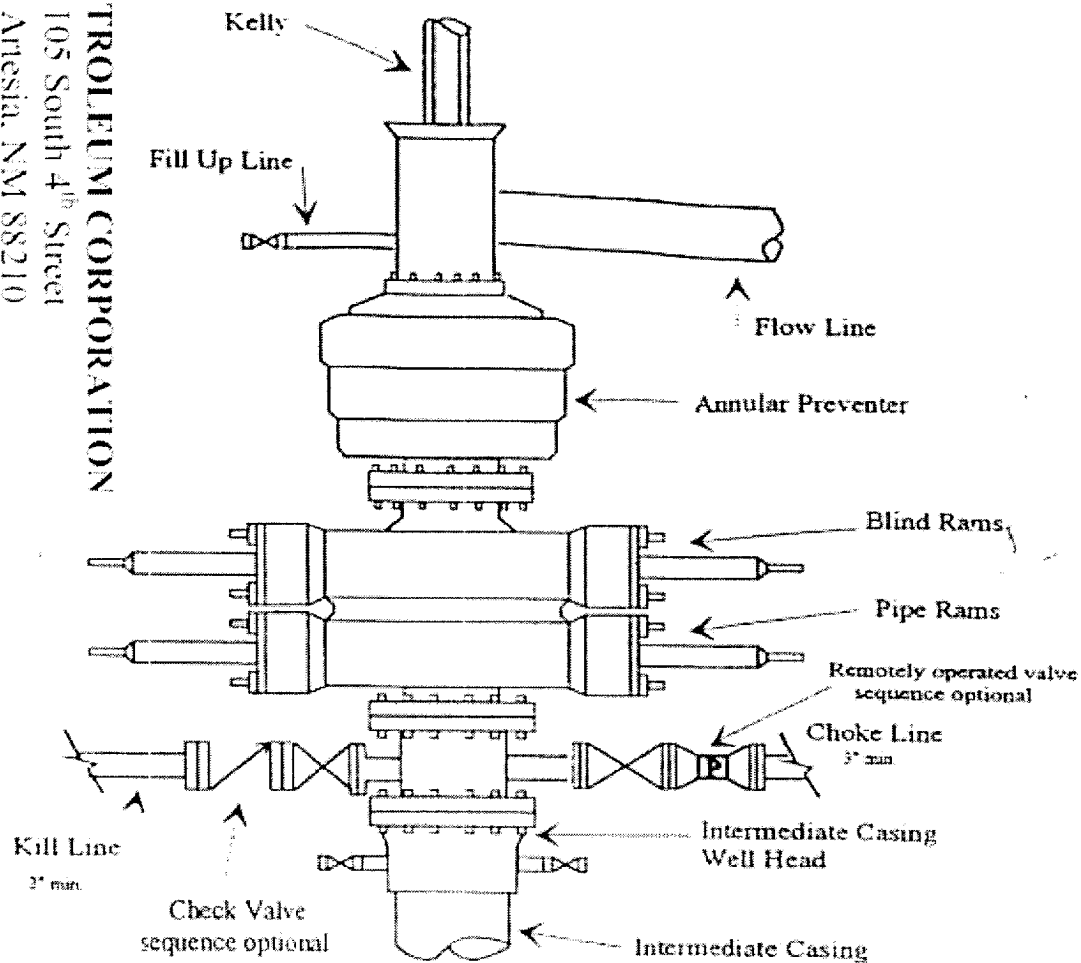
1 South 4 tr
Artesia, NM 88210

Bat ARO Federal #2

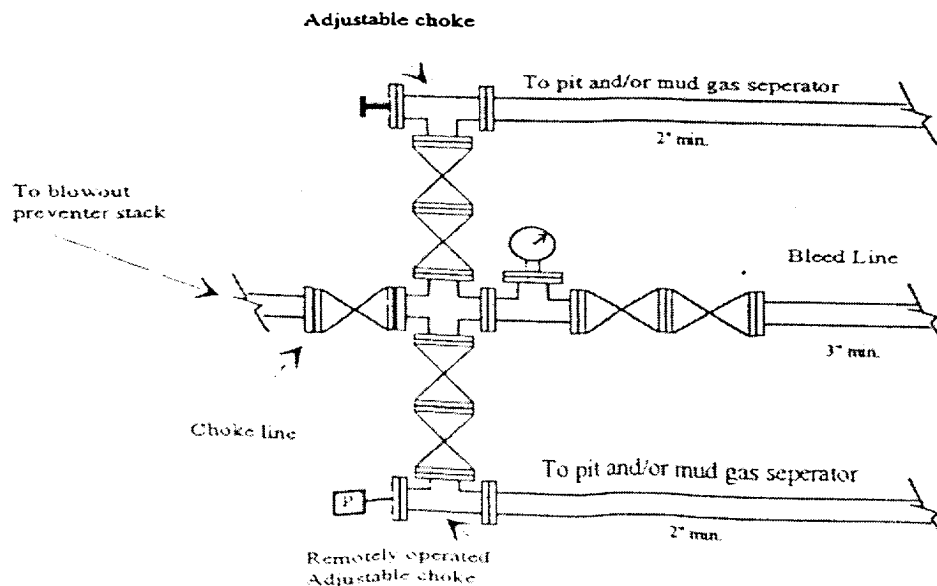
400 FSL & 70 FEL Sec T23S-R24E Surf:
000 SL & 660 FWL T2 -R2 Bottom Hol
Eddy County N Mexico
Exh A

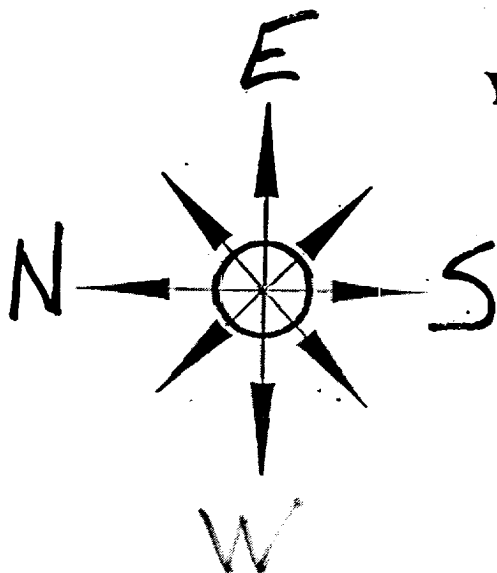
Redom #1

Typical 5,000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



Typical 5,000 psi choke manifold assembly with at least these minimum features





Yates Petroleum Corporation
Location Layout for Permian Basin
Up to 12,000'

PB - L1

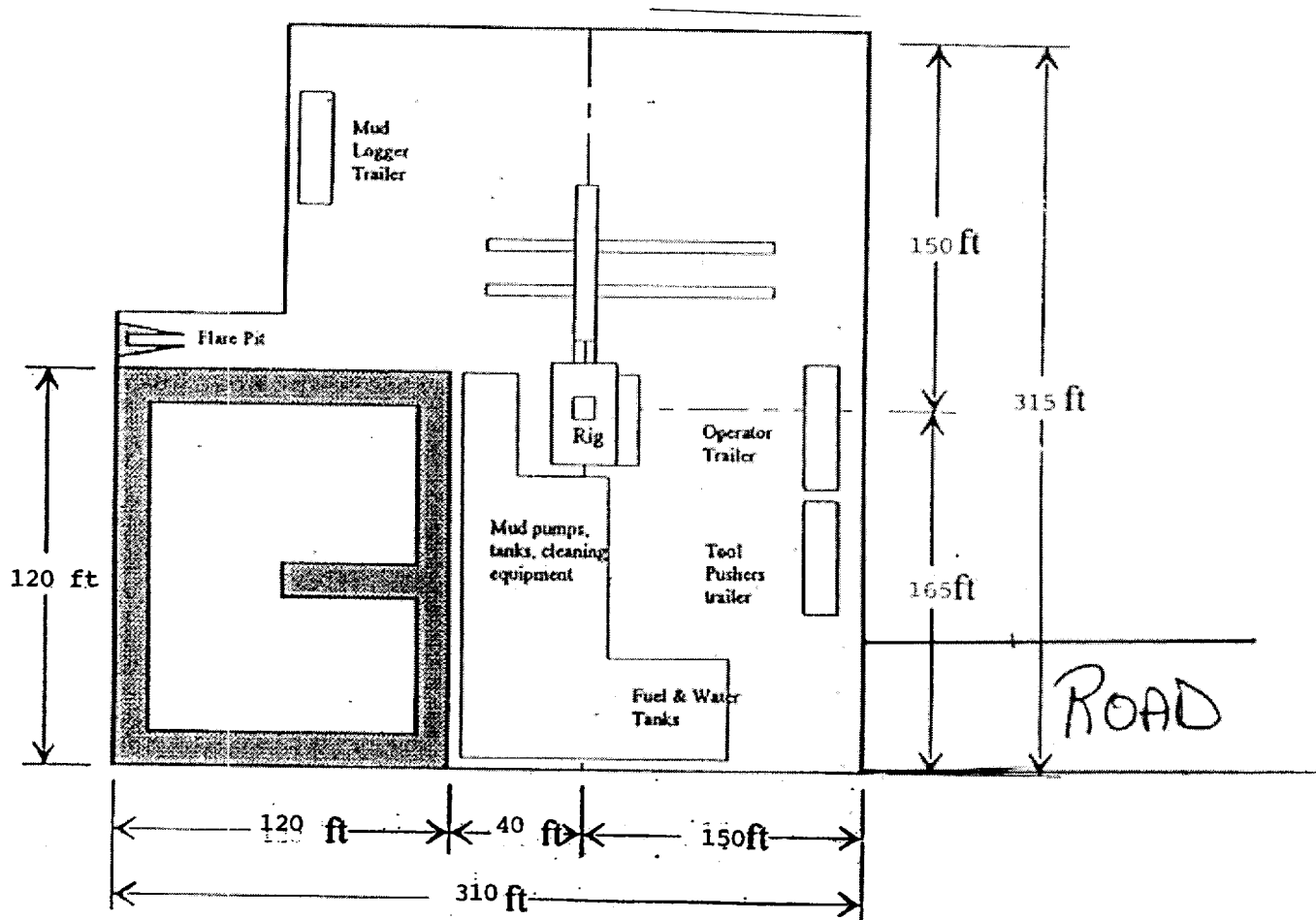
Pits North

YATES PETROLEUM CORPORATION

105 South 4th Street
Artesia, NM 88210

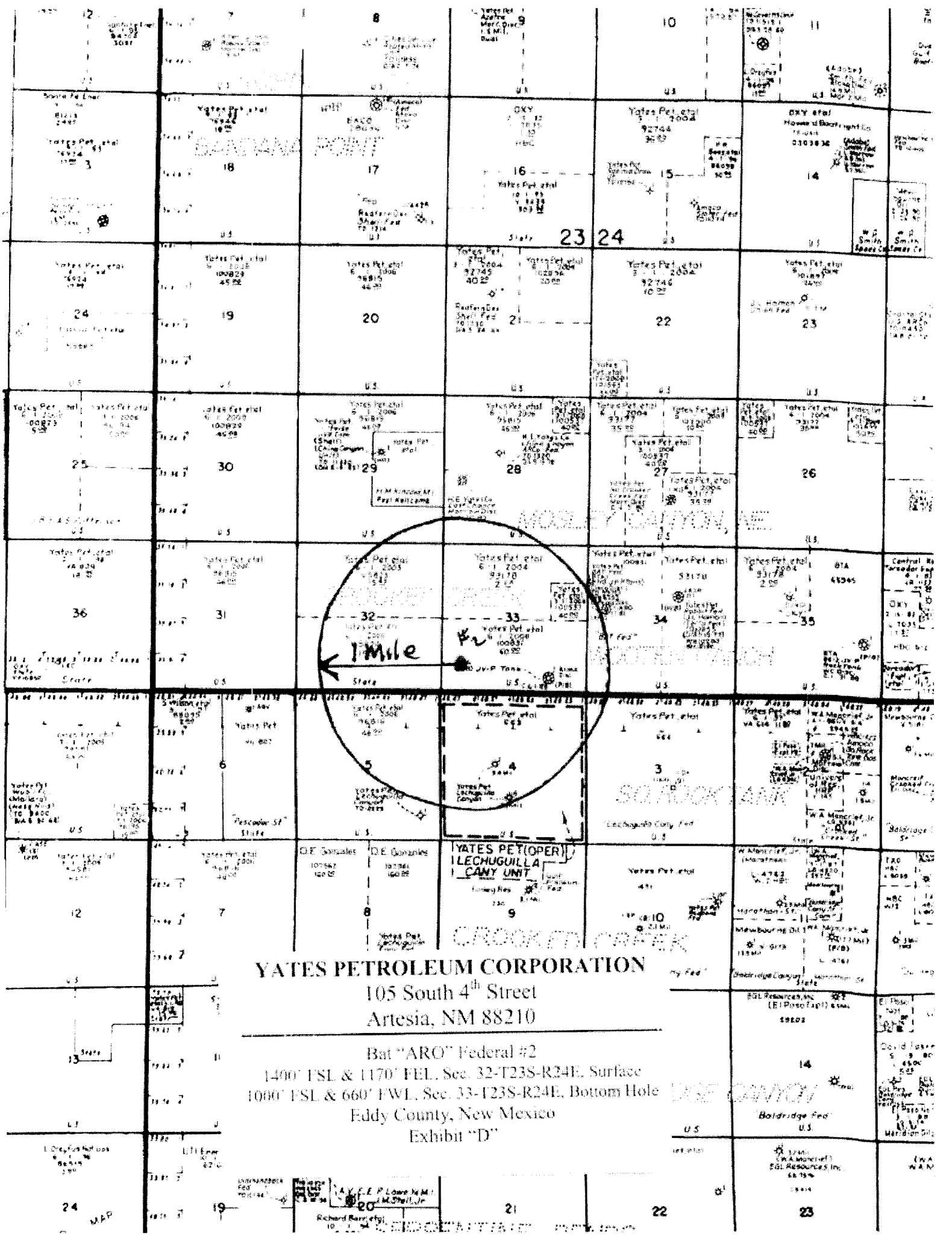
Bat "ARO" Federal #2

1400' FSL & 1170' FEL, Sec. 32-T23S-R24E, Surface
1000' FSL & 660' FWL, Sec. 33-T23S-R24E, Bottom Hole
Eddy County, New Mexico
Exhibit "C"



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum



YATES PETROLEUM CORPORATION

105 South 4th Street
Artesia, NM 88210

Bat "ARO" Federal #2
1400' FSL & 1170' FEL, Sec. 32-T23S-R24E, Surface
1000' FSL & 660' FWL, Sec. 33-T23S-R24E, Bottom Hole
Eddy County, New Mexico
Exhibit "D"