

N. M. Oil Cons. Division

811 S. 1ST ST.

ARTESIA, NM 88210-2634

c/sf

Form 3160-3
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

0
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No.

NM-18612

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

12518

8. Lease Name and Well No.

Long Arroyo WH Federal #2

9. API Well No.

30-005-63386

10. Field and Pool, or Exploratory

Wildcat Chester

11. Sec., T., R., M., or Blk. and Survey or Area

Section 11, T14S-R27E

12. County or Parish

Chaves

13. State

NM

1a. Type of Work: ☒ DRILL☐ REENTER

b. Type of Well:

☐ Oil Well ☒Gas
Well☐

Other

☐Single
Zone☐

Multiple Zone

2. Name of Operator

Yates Petroleum Corporation

3A. Address 105 South Fourth Street

Artesia, New Mexico 88210

3b. Phone No. (include area code)

(505) 748-1471

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface

660' FSL and 660' FEL

At proposed prod. Zone

UNIT P

14. Distance in miles and direction from nearest town or post office*

Approximately 9 miles east of Hagerman, New Mexico.

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

320

17. Spacing Unit dedicated to this well

320 S/2

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

1980'

19. Proposed Depth

8135'

20. BLM/BIA Bond No. on file

585997

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3520' GL

22. Approximate date work will start*

ASAP

23. Estimated duration

30 days

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO shall be filed with the appropriate Forest Service Office.4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the
authorized office.

25. Signature

Name (Printed/Typed)

Cy Cowan

Date

3/27/01

Title:

Regulatory Agent

Approved by (Signature)

Name (Printed/Typed)

S. L. SMITH

Date

MAY 24 2001

Title

Field Manager,
Minerals

Office

FIELD OFFICE

APPROVED FOR YEAR

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, are attached.

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.

*(Instructions on reverse)

RECEIVED
MAR 9 7 2001
BLM
ROSWELL, NM

DISTRICT I
1688 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1800 Ma Brasos Rd., Aztec, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name Wildcat
Property Code	Property Name LONG ARROYO "WH" FEDERAL	Well Number 2
OCRED No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3520

Surface Location

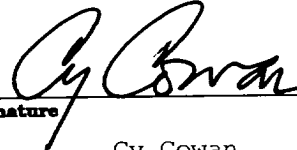
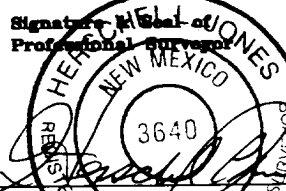
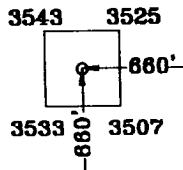
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	11	14S	27E		660	SOUTH	660	EAST	CHAVES

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

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
------------------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT 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 Cy Cowan Printed Name Regulatory Agent Title March 27, 2001 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 belief. 2/22/2001 Date Surveyed  Signature Professional Surveyor NEW MEXICO 3640 Certificate No. Herchel L. Jones RLS 3640 LONG ARROYO 2 PROFESSIONAL LAND SURVEYOR GENERAL SURVEYING COMPANY
Long Arroyo WH Fed #1 660'	NM-18612			

YATES PETROLEUM CORPORATION
Long Arroyo WH Federal #2
660' FSL AND 660' FEL
Section 11-T14S-R27E
Chaves County, New Mexico

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

Yates	165'	Cisco	6975'
Seven Rivers	365'	Lower Canyon	7265'
Queen	855'	Strawn	7445'
Grayburg	1165'	Atoka	7685'
San Andres	1465'	Morrow Clastics	7805'
Glorietta	2805'	Austin Cycle	7925'
Tubb	4225'	Chester	7985'
Abo	5015'	TD	8135'
Wolfcamp	6045'		

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

Water: 250'-350'
Oil or Gas: All Potential formations

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" 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>Coupling</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-300'	300'
11"	8 5/8"	24#	J-55	ST&C	0-1500'	1500'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	100'-6900'	6800'
7 7/8"	5 1/2"	17#	J-55	LT&C	6900'-8135'	1235'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80
2. Yates Petroleum Corporation requests that a variance be granted in requiring the casing and BOPE to be tested to 2000 PSI to testing the casing and BOPE to 1000 PSI. The rig pumps will be used to test the casing and BOPE. 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: Cement with 220 sx. Premium "C" (Yld 1.32 Wt. 14.8).

Intermediate Casing: 250 sx Interfill (Yld 2.0 Wt 13). Tail in with 200 sx Premium "C" (Yld 1.67 Wt 13.0).

Production Casing: TOC-4500'. Cement with 600 sx Super "H" (Yld 1.67 Wt 13).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-300'	FW/Native Mud	8.6-9.6	28-32	N/C
300'-1500'	Brine	10-10.2	28	N/C
1500'-7400'	Cut Brine	8.8-9.4	28	N/C
4400'-TD	Salt Gel/Starch	9.2-9.8	30-38	<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 out from surface casing to TD.

Logging: Platform Express, CNL/LDT W/NGT to TD to surface casing, w GR/CNL TD to surface, DLL/MSFL TD to surface casing, BHC Sonic TD to surface casing.

Coring: None

DST's:None

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

Anticipated BHP:

From: 0	To: 300'	Anticipated Max. BHP:	130 PSI
From: 300'	To: 1500'	Anticipated Max. BHP:	700 PSI
From: 1500'	To: TD	Anticipated Max. BHP:	4100 PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None

H2S Zones Anticipated: None

Maximum Bottom Hole Temperature: 179 F

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. 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
Long Arroyo WH Federal #2
660' FSL AND 660' FEL
Section 11-T14S-R27E
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 the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 9 miles east of Hagerman, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

From the east side of Hagerman, New Mexico, go east on Aberdeen Road (Highway 249) for approx. 6.1 miles. There will be a cattleguard on the left side of the road. Turn left crossing cattleguard on an existing lease road and go northeast. At approx. .6 of a mile you will pass the Long Arroyo OD Fed. #2 well. Continue east for approx. 1.2 miles passing stock tanks on the way to an old pit on the left. The road will turn left (north). Continue north for approx. .4 of a mile. The new road will start here going to the west.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 400 feet in length from the point of origin to the southeast corner of the drilling pad. The road will lie in an east 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 both sides. No 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.

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:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits which may be required.

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.
- C. A 400' x 400' area has been staked and flagged.
- D. The pits will be put to the WEST.

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, Roswell, 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:

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

- B. Through Drilling Operations,
Completions and Production:
Pinson McWhorter,
Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

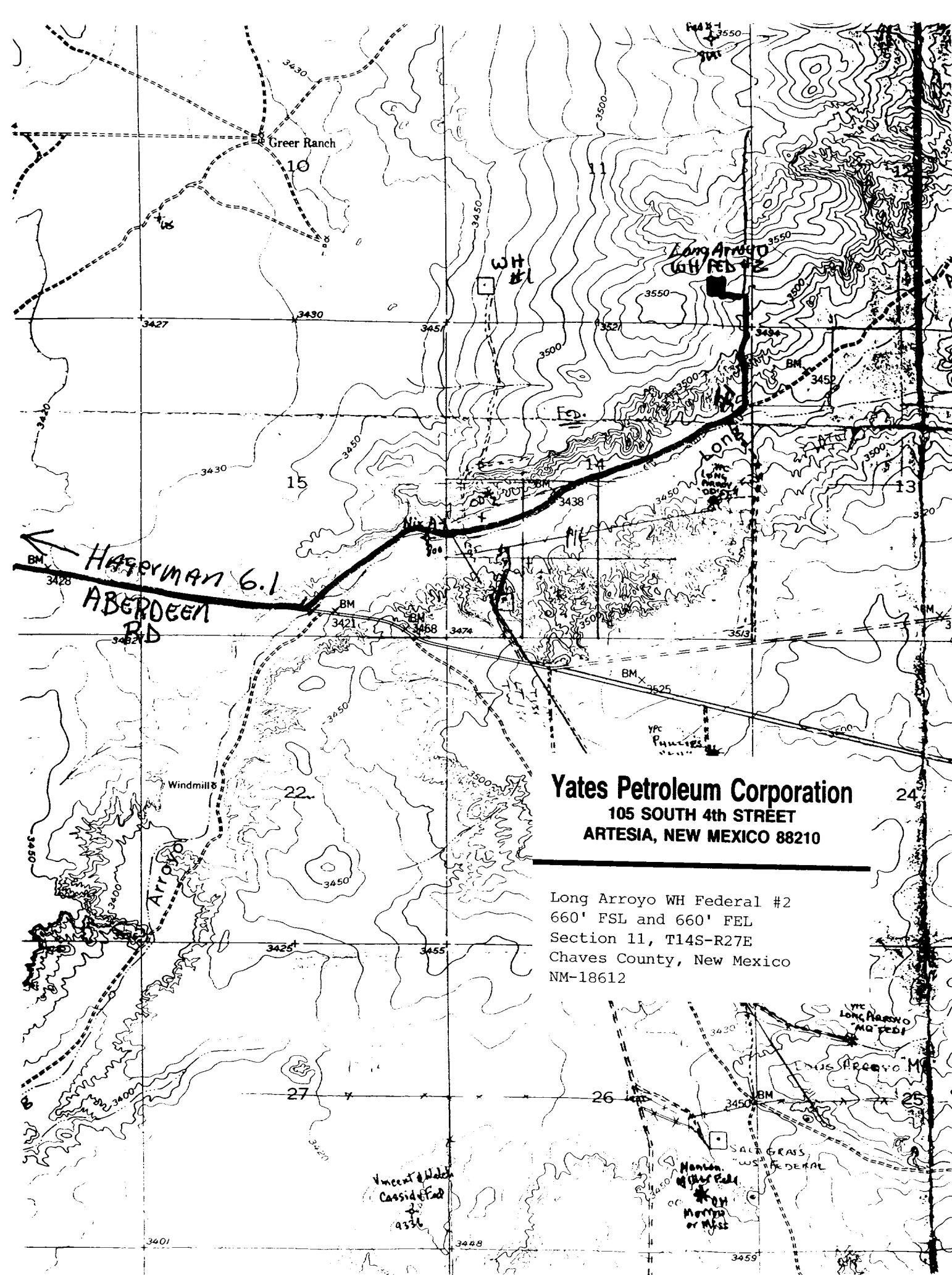
14. CERTIFICATION:

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.

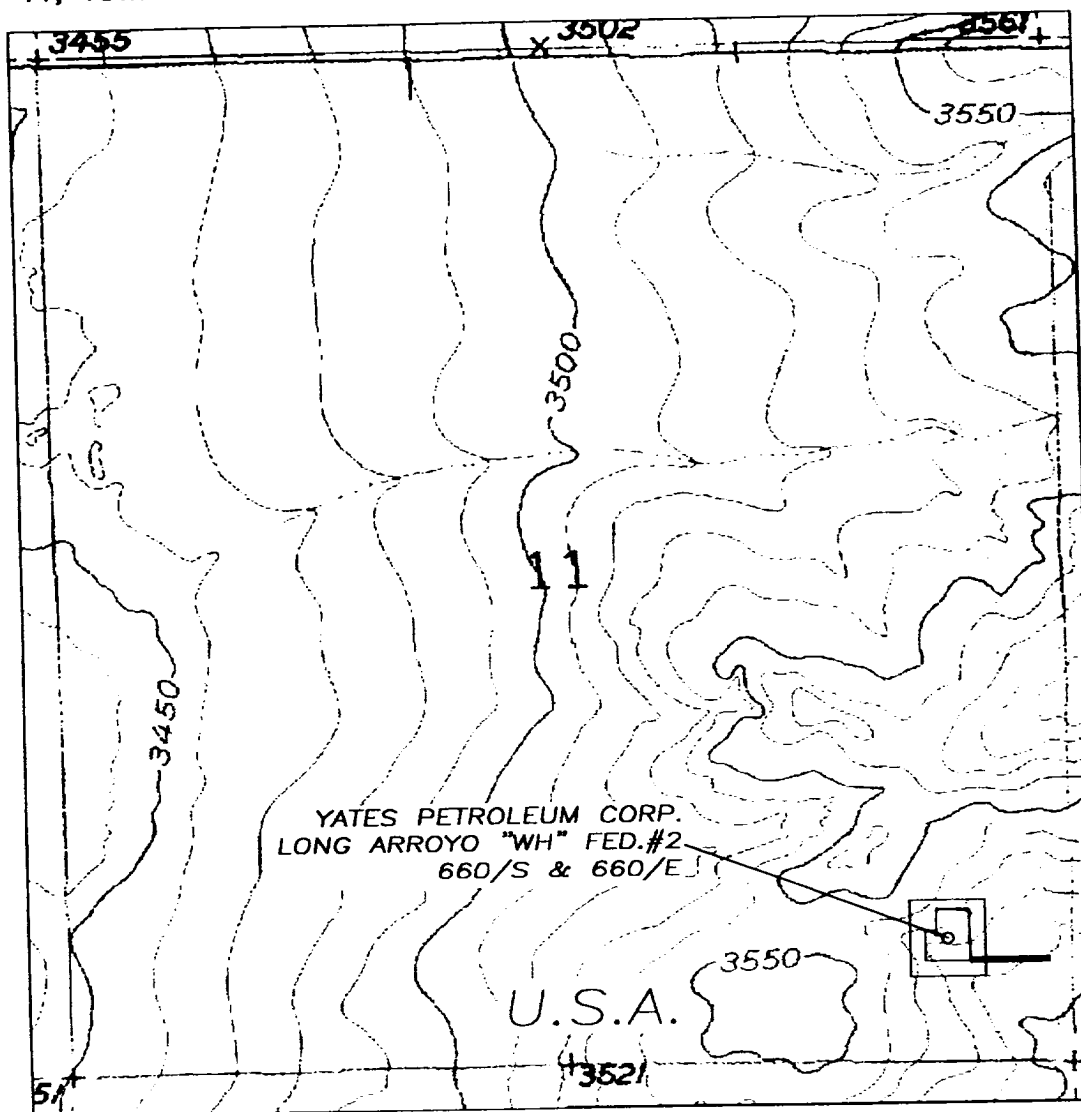
3/27/01



Regulatory Agent



SECTION 11, TOWNSHIP 14 SOUTH, RANGE 27 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.



Pits
West.

1000' 0 1000' 2000'
Scale 1" = 1000'

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 AND MEETS THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

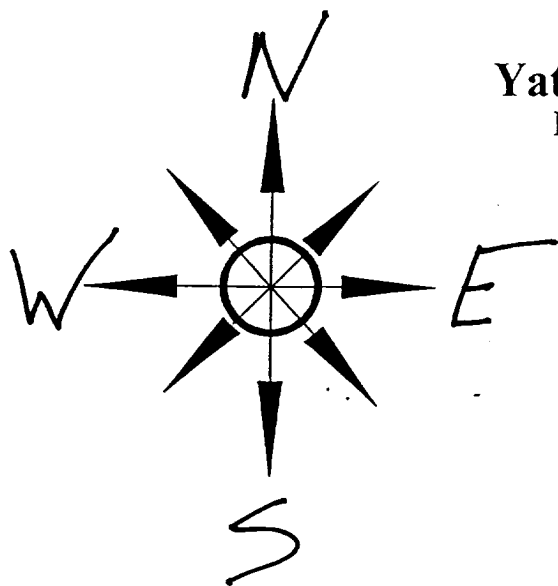
[Signature]
HERSCHEL L. JONES, R.L.S. No. 3640

GENERAL SURVEYING COMPANY P.O. BOX 1928
LOVINGTON, NEW MEXICO 88260

YATES PETROLEUM CORP.

LEASE ROAD TO ACCESS THE YATES LONG ARROYO "WH" FEDERAL #2 LOCATED IN SECTION 11, TOWNSHIP 14 SOUTH, RANGE 27 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

Survey Date: 2/22/2001	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 2/22/01	Scale 1" = 1000' L ARROYO



Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'

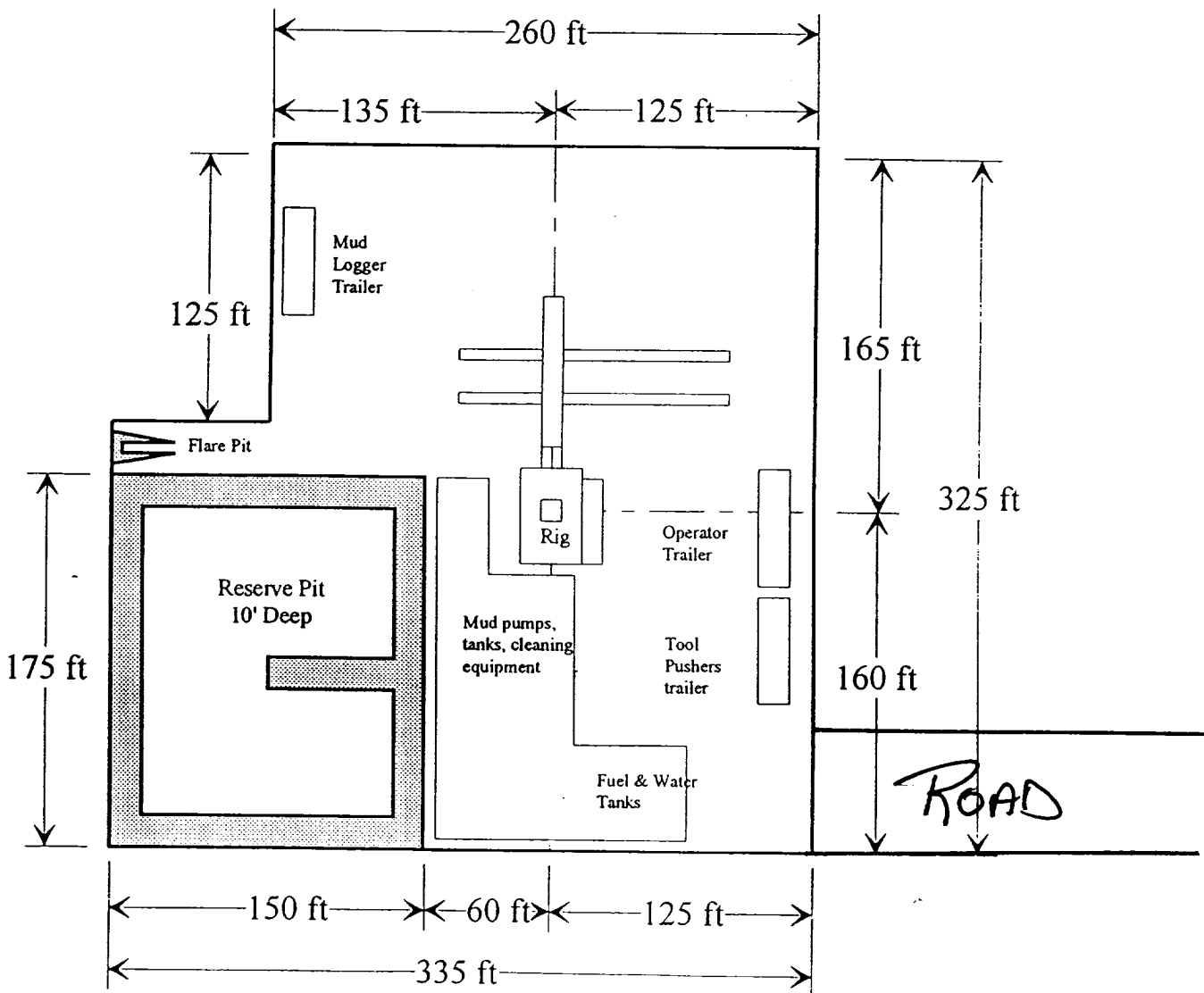
PB - L1

Yates Petroleum Corporation

105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

*Pits
West.*

Long Arroyo WH Federal #2
660' FSL and 660' FEL
Section 11, T14S-R27E
Chaves County, New Mexico
NM-18612



Distance from Well
Head to Reserve Pit
will vary between rigs

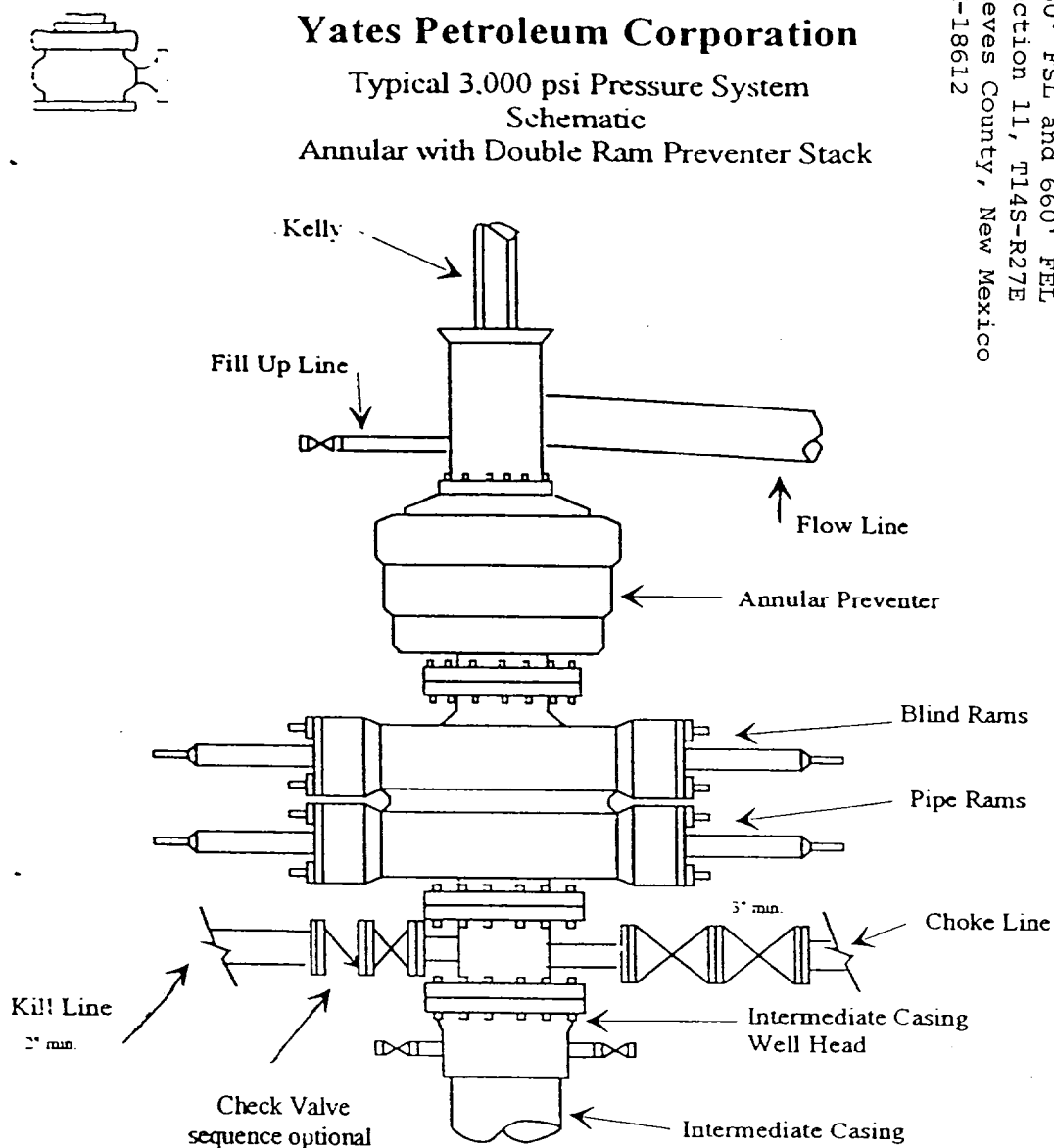
The above dimension
should be a maximum

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

Long Arroyo WH Federal #2
 660' FSL and 660' FEL
 Section 11, T14S-R27E
 Cheves County, New Mexico
 NM-18612

Yates Petroleum Corporation

Typical 3,000 psi Pressure System
 Schematic
 Annular with Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features

