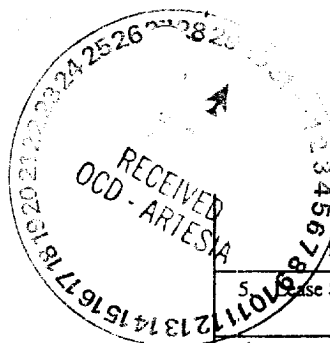


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER



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

5. Lease Serial No.
NM-18483

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name, and No.
12581

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Morton SZ Federal #5

2. Name of Operator
YATES PETROLEUM CORPORATION

9. API Well No.
30-005-63242

3a. Address 105 South Fourth Street
Artesia, New Mexico 88210

3b. Phone No. (include area code)
(505) 748-1471

10. Field and Pool, or Exploratory
Wildcat

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

11. Sec., T., R., M., or Blk. and Survey or Area
Section 10, T8S-R25E

At surface 1980' FSL and 1980' FEL
At proposed prod. zone Same

Unit J

14. Distance in miles and direction from nearest town or post office*
Approximately 18 miles northeast of Roswell, New Mexico.

12. County or Parish Chaves County
13. State New Mexico

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 1980'

16. No. of Acres in lease
640

17. Spacing Unit dedicated to this well
E/2

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

19. Proposed Depth
5390'

20. BLM/BIA Bond No. on file
585997

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3623'

22. Approximate date work will start*
ASAP

23. Estimated duration
15 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 officer.

25. Signature

Name (Printed/Typed)
Cy Cowan

Date
February 22, 2000

Title
Regulatory Agent

Approved by (Signature)
Title Acting Assistant Field Manager,
Lands And Minerals

Name (Printed/Typed)
(ORIG. SGD.) ARMAND A. LOPEZ
Office

Date
FEB 23 2000

Application approval does not warrant or certify the 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)

BUREAU OF LAND MANAGEMENT
ROSWELL OFFICE

2000 FEB 24 A 11: 08

RECEIVED

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

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

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 Precambrian
Property Code	Property Name	Well Number
	MORTON "SZ" FEDERAL	5
OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	3623

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	10	8S	25E		1980	SOUTH	1980	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	Joint or Infill	Consolidation Code	Order No.						
320									

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


		NM 18483	OPERATOR CERTIFICATION
		SZ #2	I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
			 Signature
			Printed Name Cy Cowan
			Title Regulatory Agent
			Date February 22, 2000
			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.
			Date Surveyed 11/29/1999
			Signature of Professional Surveyor
			HEIRSCHEL JONES NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 3640
			Certificate No. Heirschel Jones RLS 3640
			MORTON 5 RISK 17
			GENERAL SURVEYING COMPANY

Diagram showing well location and acreage dedication plat. The diagram includes a grid with dimensions 1980' and 3623, 3620, 3624, 3622. The well location is marked with a dot and labeled SZ #2. The diagram also shows a well location marked with a dot and labeled SZ #4.

**YATES PETROLEUM CORPORATION
MORTON SZ FEDERAL #5
1980' FSL AND 1980' FEL
Section 10,-T8S-R25E
Chaves County, New Mexico**

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

San Andres	380'	Basement Granite	5290'
Glorieta	1385'	TD	5390'
Yeso	1500'		
Tubb	2935'		
Abo	3635'		
Wolfcamp	4395'		

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

Water: 200'-300'
Oil or Gas: 3635' to 5930'

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 2000# 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</u>	<u>Size Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
12 1/4"	8 5/8"	24#	J55	ST&C	0-1000'	1000'
7 7/8"	5 1/2"	15.5#	J55	ST&C	0-5390'	5390'

- Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, Tensile Strength 1.80
- 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 500 PSI. The rig pumps will be used to test the casing and BOPE. Rig pumps used in this area cannot safely test above 500 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 500-1100 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 350 sx Lite "C" (Yield 2.0, Wt. 12.5). Tail in with 200 sx "C" + 2% CaCl₂ (Yield 1.33, wt. 15.6).

Production Casing: TOC 3100'. Cement with 350 sx Super "C" (Yield 1.67 Wt.13.0).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
Spud - 1000'	FW Gel/Paper/LCM	8.6-9.6	32-36	N/C
1000' - 3610'	Brine	10-10.2	28	N/C
3610' to TD	Salt Gel/Starch/Oil/LCM	9.0-9.3	34-35	<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: Plat Form Express: CNL/LDT w/NGT TD to surface casing; CNL/GR up to surface; DLL/MSFL TD to surface casing; BHC Sonic TD to surface casing

Coring: None anticipated.

DST's: None anticipated.

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

Anticipated BHP:

From: 0	To: 1000'	Anticipated Max. BHP: 400 PSI
From: 1000'	To: TD	Anticipated Max. BHP: 1100 PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 110 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
Morton SZ Federal #5
1980' FSL and 1980' FEL
Section 10-T8S-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 the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 18 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 (east) on One Horse Road and go approximately 2.5 miles then continue to the northeast on Cottonwood Road for approximately 4.5 miles. Turn east and follow existing lease road for approximately 4.4 miles to the Morton SZ Federal #4 well. Continue north on the existing lease road for approximately 0.3 of a mile. The new access road will start here going west.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 0.2 of a mile in length from the point of origin to the northeast 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 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.

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 any surfacing materials needed and will obtain any permits that may be 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 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, and the access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged.
- D. Pad will be rotated with the pits to the south.

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: Federal surface administered by 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

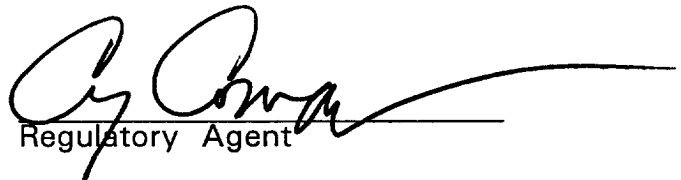
- B. Through Drilling Operations,
Completions and Production:

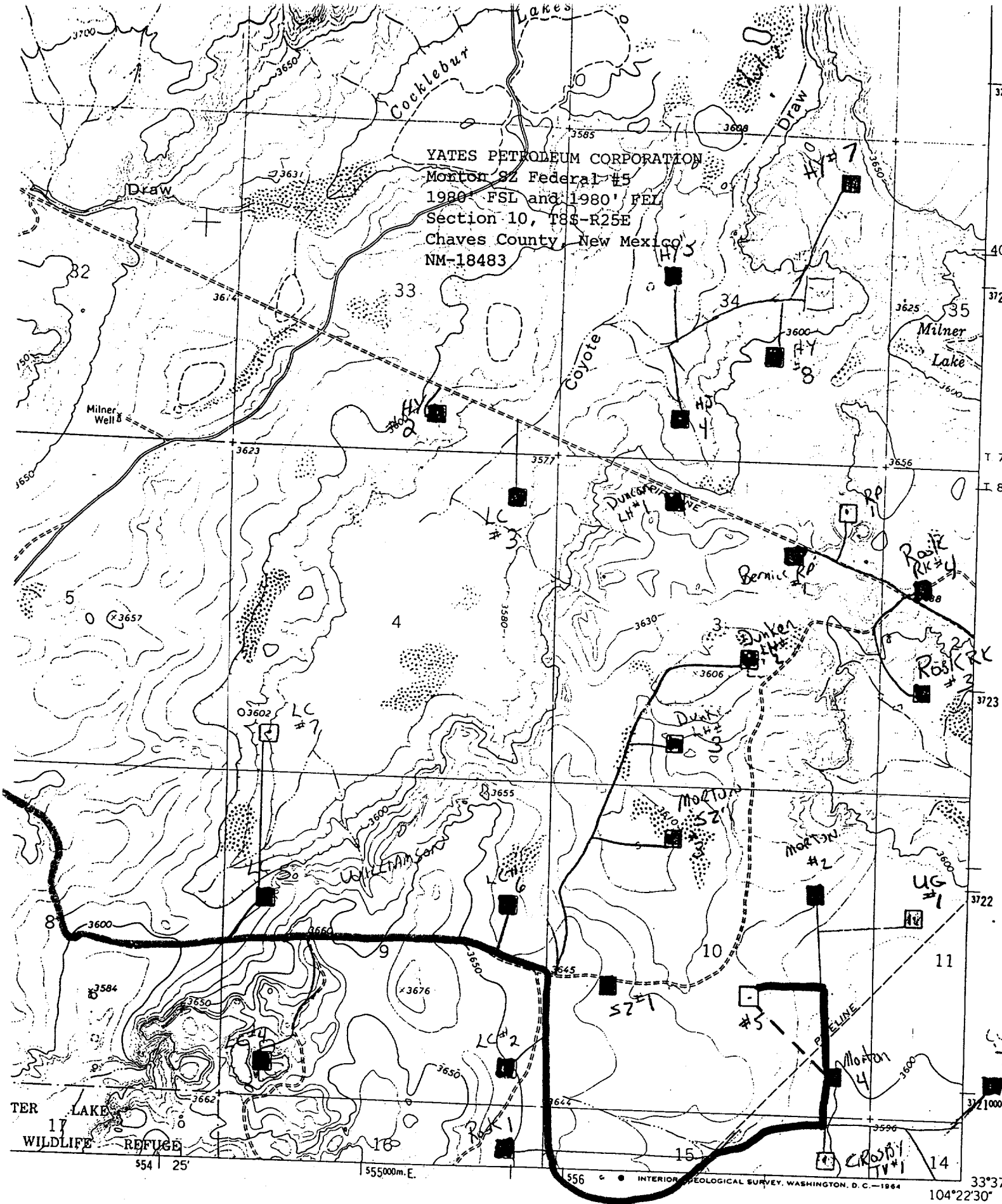
Brian Collins, Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

14. CERTIFICATION:

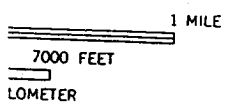
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated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

2/22/00


Regulatory Agent



YATES PETROLEUM CORPORATION
Morton #2 Federal #5
1980' FSL and 1980' FEL
Section 10, T8S-R25E
Chaves County, New Mexico
NM-18483

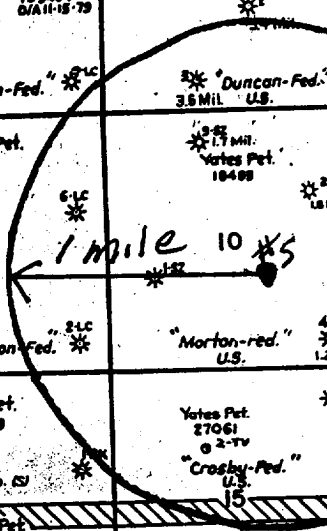


ROAD CLASSIFICATION
Light-duty ————— Unimproved dirt - - - - -

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

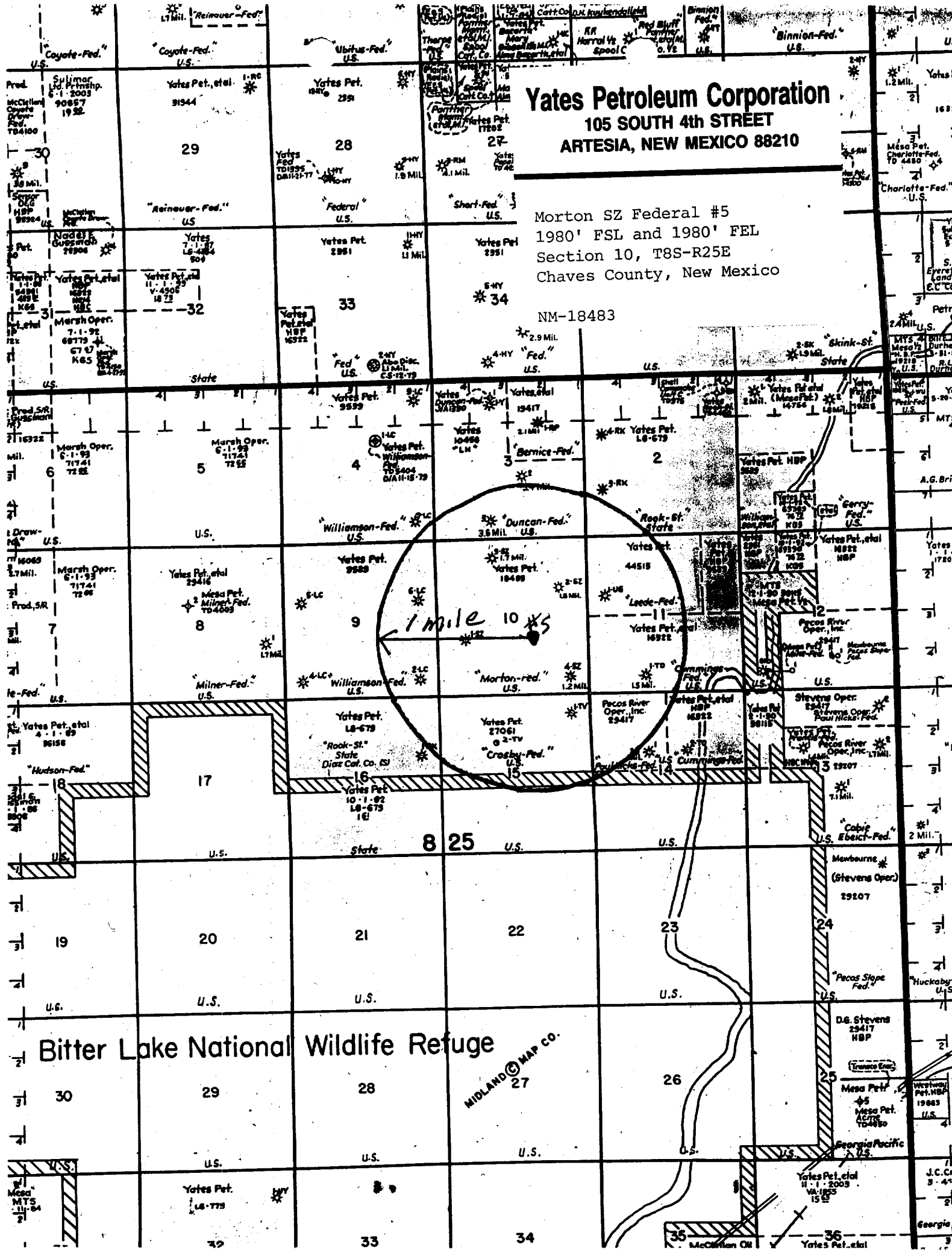
Morton SZ Federal #5
 1980' FSL and 1980' FEL
 Section 10, T8S-R25E
 Chaves County, New Mexico

NM-18483



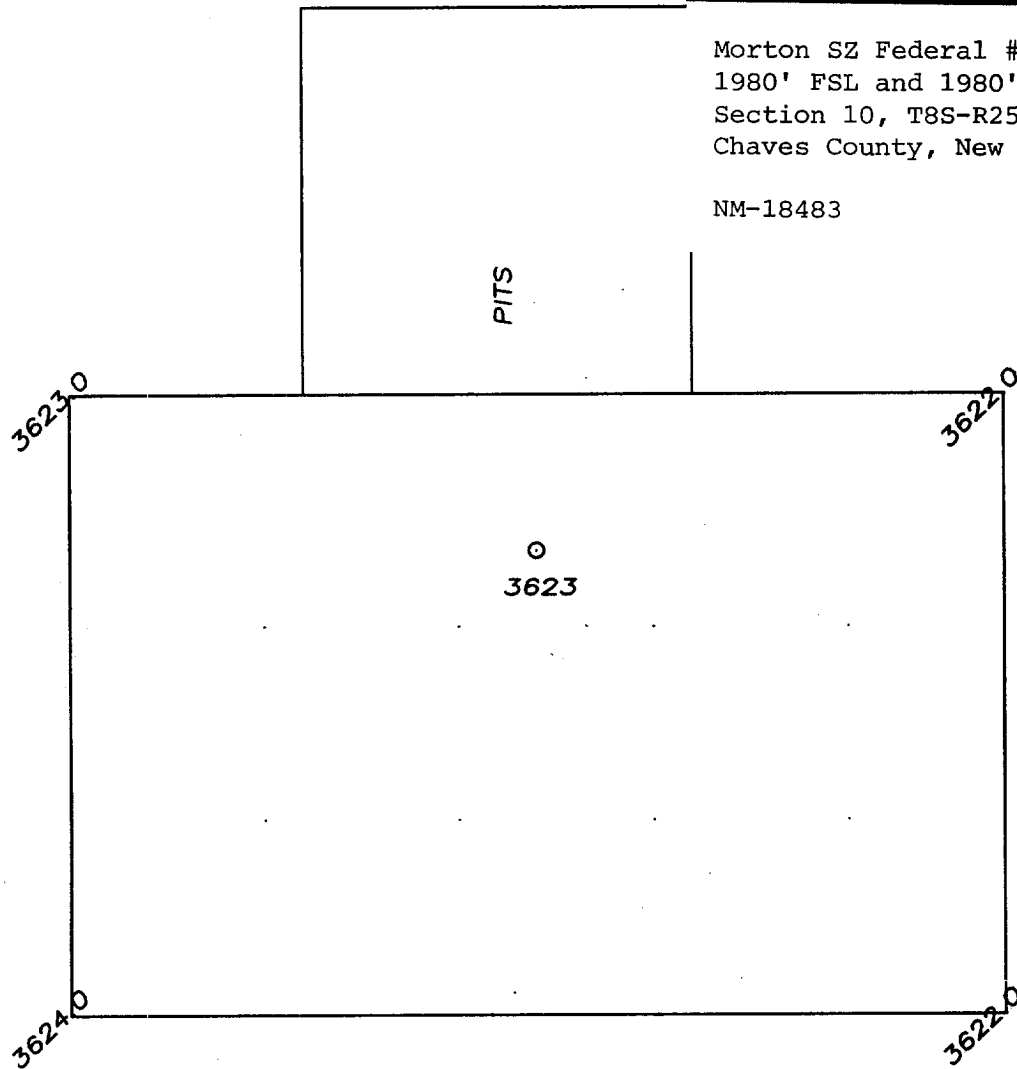
Bitter Lake National Wildlife Refuge

MIDLAND MAP CO.
 27



YATES PETROLEUM CORPORATION MORTON "SZ" FED.#5 1980/S & 1980/E
SECTION 10, TOWNSHIP 8 SOUTH, RANGE 25 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

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



Morton SZ Federal #5
1980' FSL and 1980' FEL
Section 10, T8S-R25E
Chaves County, New Mexico

NM-18483

50' 0 50' 100'
Scale 1" = 50'

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

HERSCHEL L. JONES REG. NO. 3640

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

YATES PETROLEUM CORP.

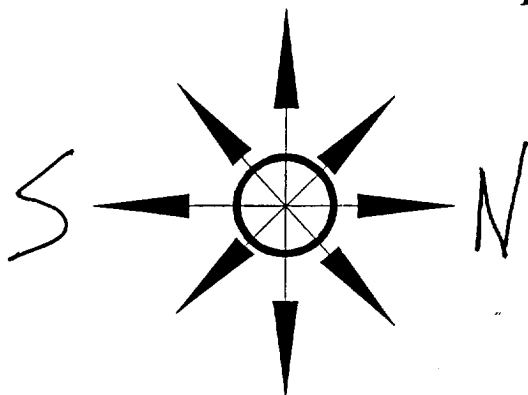
WELL PAD PLAN VIEW ON THE YATES MORTON
"SZ" FEDERAL #5 LOCATED 1980/S AND
1980/E OF SECTION 10, TOWNSHIP 8 SOUTH,
RANGE 25 EAST, NMPM, CHAVES COUNTY, NEW
MEXICO.

Survey Date: 10/29/99	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 10/29/99	Scale 1" = 50' MORTON 5

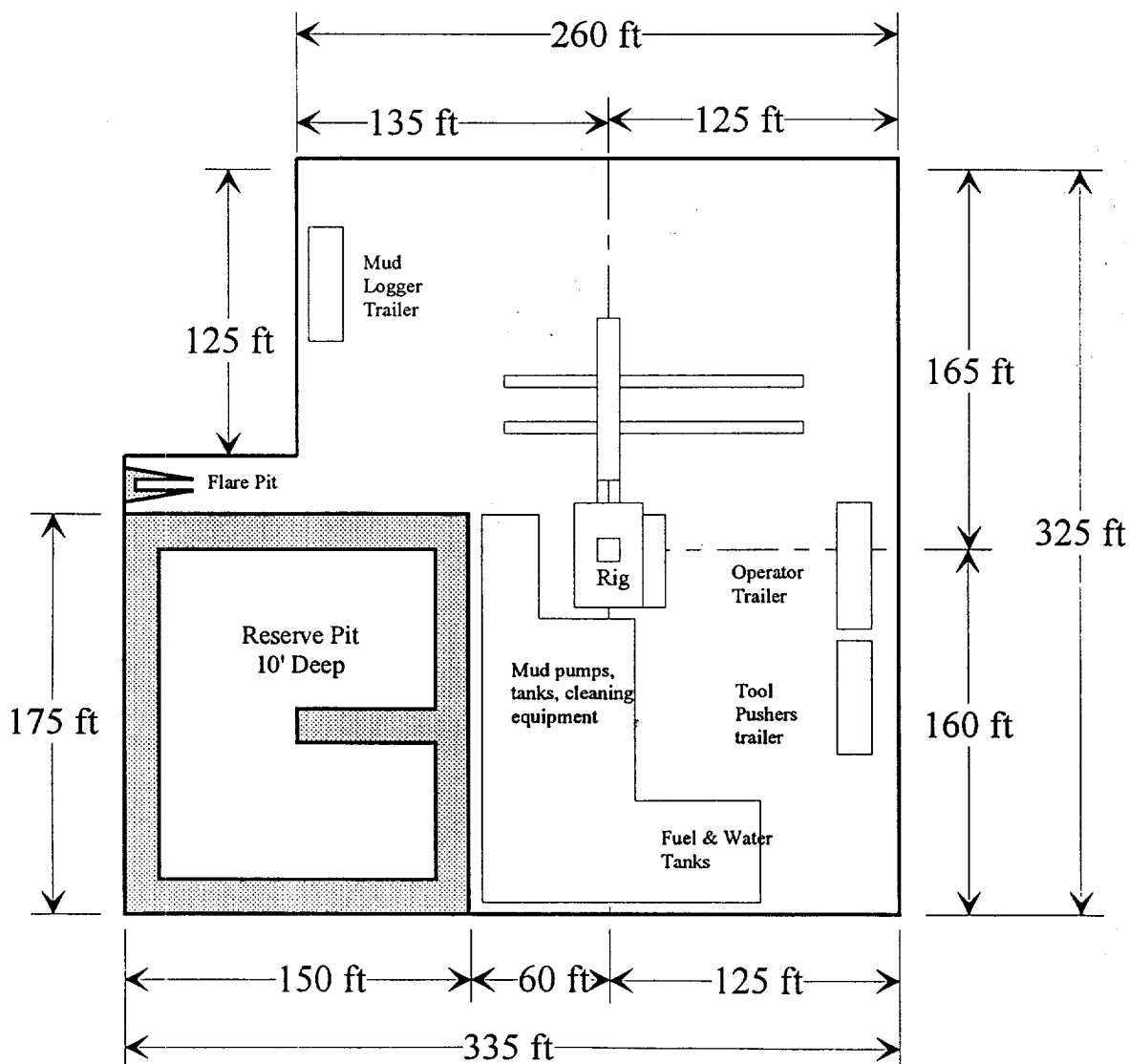
Yates Petroleum Corporation

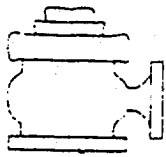
Location Layout for Permian Basin

Up to 12,000'

Yates Petroleum Corporation105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210Morton SZ Federal #5
1980' FSL and 1980' FEL
Section 10, T8S-R25E
Chaves County, New Mexico

NM-18483

Distance from Well
Head to Reserve Pit
will vary between rigsThe above dimension
should be a maximum



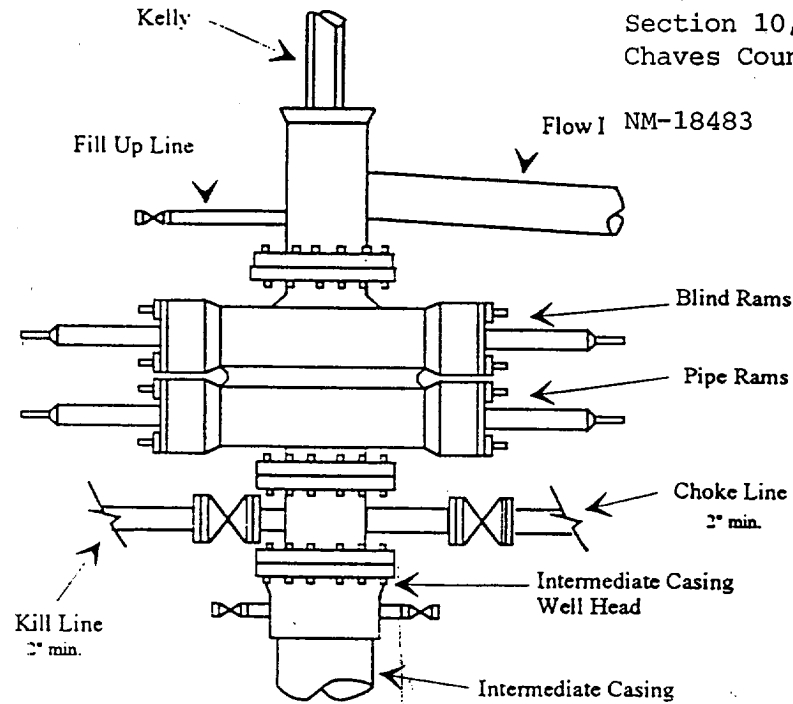
Yates Petroleum Corporation

BOP-2

Typical 2,000 psi Pressure System
Schematic
Double Ram Preventer Stack

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

Morton SZ Federal #5
1980' FSL and 1980' FEL
Section 10, T8S-R25E
Chaves County, New Mexico



Typical 2,000 psi choke manifold assembly with at least these minimum features

