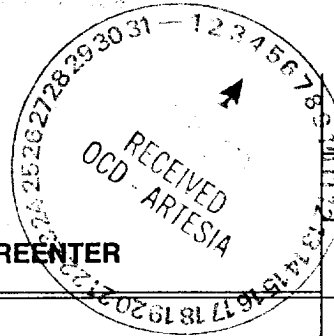


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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



| | | |
|---|---|--|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NM-29211 |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input 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. 12226 |
| 3a. Address 105 South Fourth Street Artesia, New Mexico 88210 | | 8. Lease Name and Well No. Engwall RL Federal #3 |
| 3b. Phone No. (include area code) (505) 748-1471 | | 9. API Well No. 30-005-63244 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 990' FNL and 840' FEL At proposed prod. zone Same Unit A | | 10. Field and Pool, or Exploratory Wildcat Precambrian |
| 11. Sec., T., R., M., or Blk. and Survey or Area Section 4, T9S-R26E | | 12. County or Parish Chaves County |
| 13. State New Mexico | | 14. Distance in miles and direction from nearest town or post office* Approximately 18 miles northeast of Roswell, New Mexico |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 840' | 16. No. of Acres in lease 320.44 | 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. 1000' | 19. Proposed Depth 6450' | 20. BLM/BIA Bond No. on file BLM 585997 |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3875' GL | 22. Approximate date work will start* ASAP | 23. Estimated duration 3 weeks |

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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 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 18, 2000 |
| Title Regulatory Agent | | |
| Approved by (Signature) (ORIG. SGD.) ARMANDO A. LUTZ | Name (Printed/Typed) (ORIG. SGD.) ARMANDO A. LUTZ | Date APR 04 2000 |
| Title Acting Assistant Field Manager, Lands And Minerals | Office ROSSELL FIELD OFFICE | APPROVED BY [Signature] |

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)

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|--------------------|--|----------------------------------|
| API Number | Pool Code | Pool Name Wildcat Precambrian |
| Property Code | Property Name ENGWALL "RL" FEDERAL | Well Number 3 |
| OGED No. 025575 | Operator Name YATES PETROLEUM CORPORATION | Elevation 3875 |

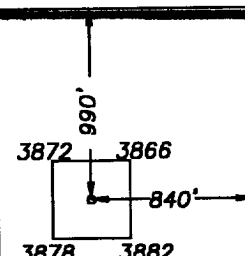
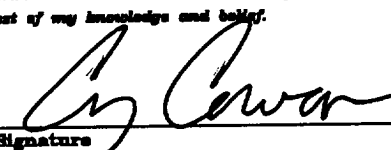
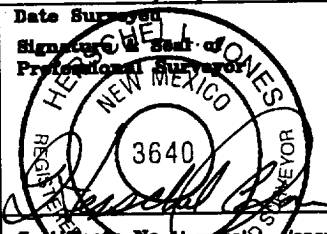
Surface Location

| | | | | | | | | | |
|--------------------|--------------|----------------|--------------|---------|----------------------|---------------------------|----------------------|------------------------|------------------|
| UL or lot No. A | Section 4 | Township 9S | Range 26E | Lot Idn | Feet from the 990 | North/South line NORTH | Feet from the 840 | East/West line EAST | County 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>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature Cy Cowan Printed Name Regulatory Agent Title February 18, 2000 Date |
| | | | #2 ○ | |
| | | | NM 29211 | SURVEYOR CERTIFICATION <i>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.</i> 1/26/2000 Date Surveyed  Signature of Professional Surveyor Certificate No. Heschel Jones RLS 3640 ENGWALL "RL" FEDERAL DISK 24 GENERAL SURVEYING COMPANY |
| | | | | |

**YATES PETROLEUM CORPORATION
ENGWALL RL FEDERAL #3
990' FNL AND 840' FEL
Sec. 4-T9S-R26E
Chaves County, New Mexico**

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

| | | | |
|------------|-------|------------------|-------|
| San Andres | 1035' | Cisco | 5712' |
| Glorieta | 2160' | Penn Clastics | 5838' |
| Yeso | 2235' | Mississippian | 6040' |
| Tubb | 3625' | Ordovician | 6085' |
| Abo | 4435' | Basement Granite | 6375' |
| Wolfcamp | 5110' | TD | 6450' |

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

Water: 150'-300'
Oil or Gas: 4435' to 6450'

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 | 0-1100' | 1100' |
| 7 7/8" | 5 1/2" | 15.5# | J55 | ST&C | 0-6450' | 6450' |

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 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 250 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 3900' Cement with 350 sx "C" with 8# Silica Lite 5# Salt (Yield 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> |
|-----------------|-----------------|---------------|------------------|-------------------|
| Spud - 1100' | FWGel/Paper/LCM | 8.6-9.6 | 32-36 | N/C |
| 1100' - 4400' | Brine | 10-10.2 | 28 | N/C |
| 4400' to TD | Polyachrilamide | 9.6-10.2 | 34-38 | <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: 20' 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: Possible sidewall coring.
DST's: None anticipated

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

Anticipated BHP:

| | | |
|-------------|-----------|--------------------------------|
| From: 0 | To: 1100' | Anticipated Max. BHP: 400 PSI |
| From: 1100' | 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
Engwall RL Federal #3
990' FNL and 840' FEL
Sec. 4-T9S-R26E
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 east of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Roswell on Highway 70 to the Acme School House. Turn right on (south) on Magdalena road and go approximately 4.5 miles. Just past the windmill turn northeast and go approximately 1.4 miles on main lease road. At this point turn west and go approximately 1300' on the lease road to the Engwall RL Federal #2. The new road will start here going northwest.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 400' in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a(n) southeast/northwest 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, 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. 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

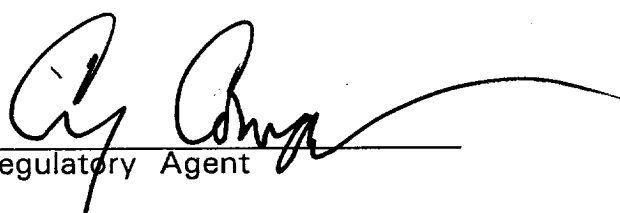
- B. Through Drilling Operations,
Completions and Production:

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

14. CERTIFICATION:

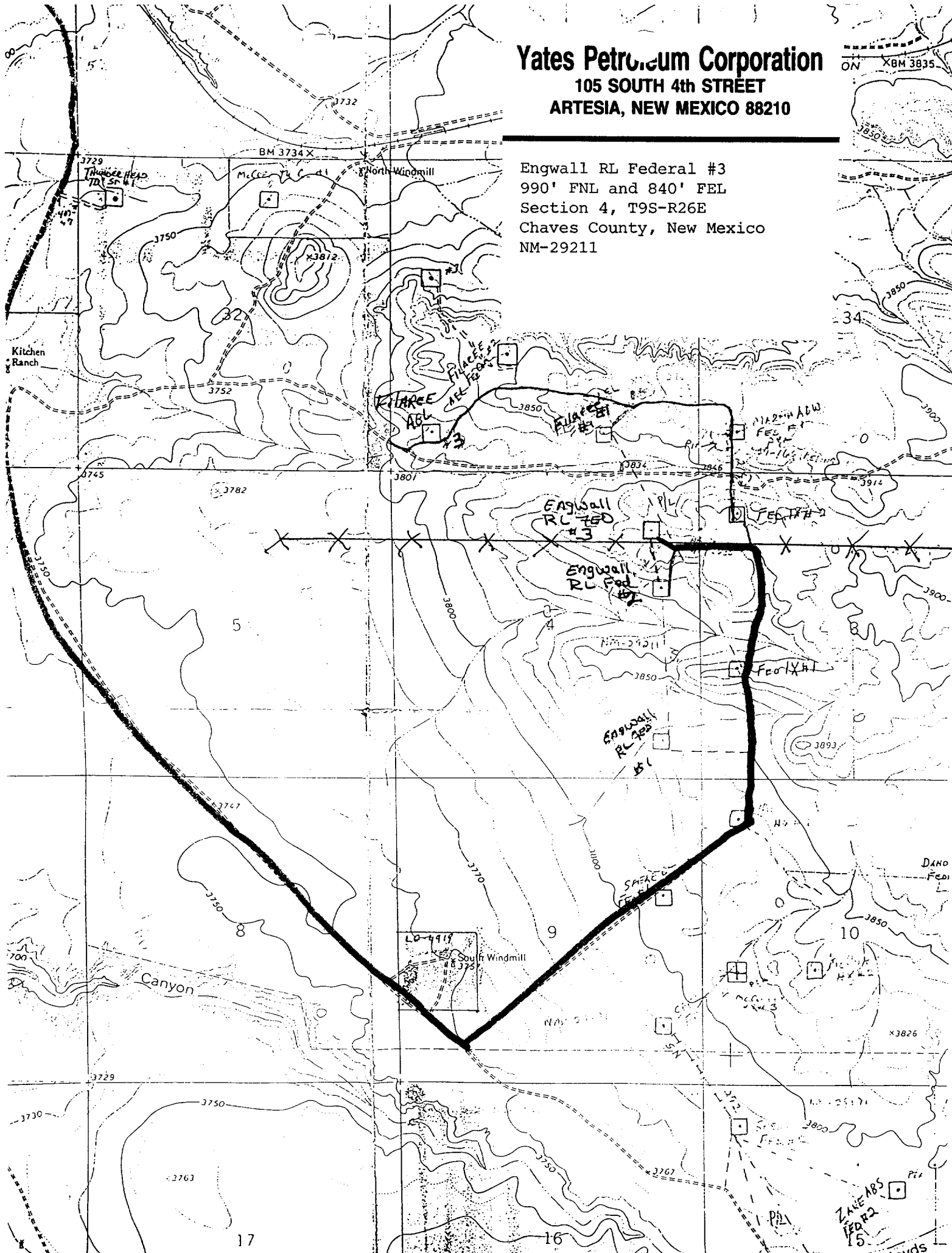
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and , that the work associated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

2/18/00

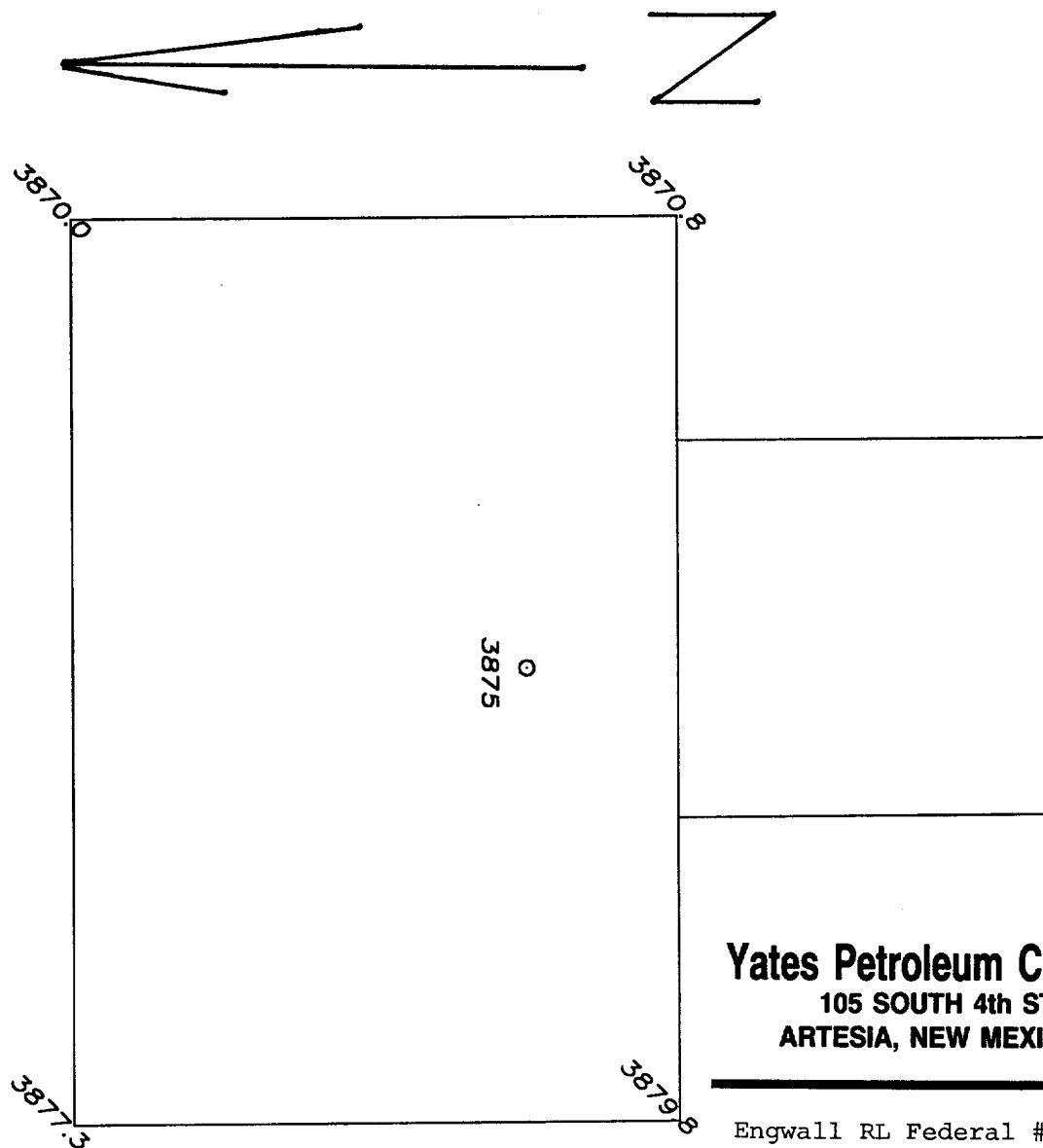

Regulatory Agent

ON XBM 3835

3850



YATES PETROLEUM CORP. ENGWALL "RL" FED. #3 990/N & 840/E.
SECTION 4, TOWNSHIP 9 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO.



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

Engwall RL Federal #3
990' FNL and 840' FEL
Section 4, T9S-R26E
Chaves County, New Mexico
NM-29211

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

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 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.

3640
HERSCHEL L. JONES, S.L.S. No. 3640

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

YATES PETROLEUM CORP.

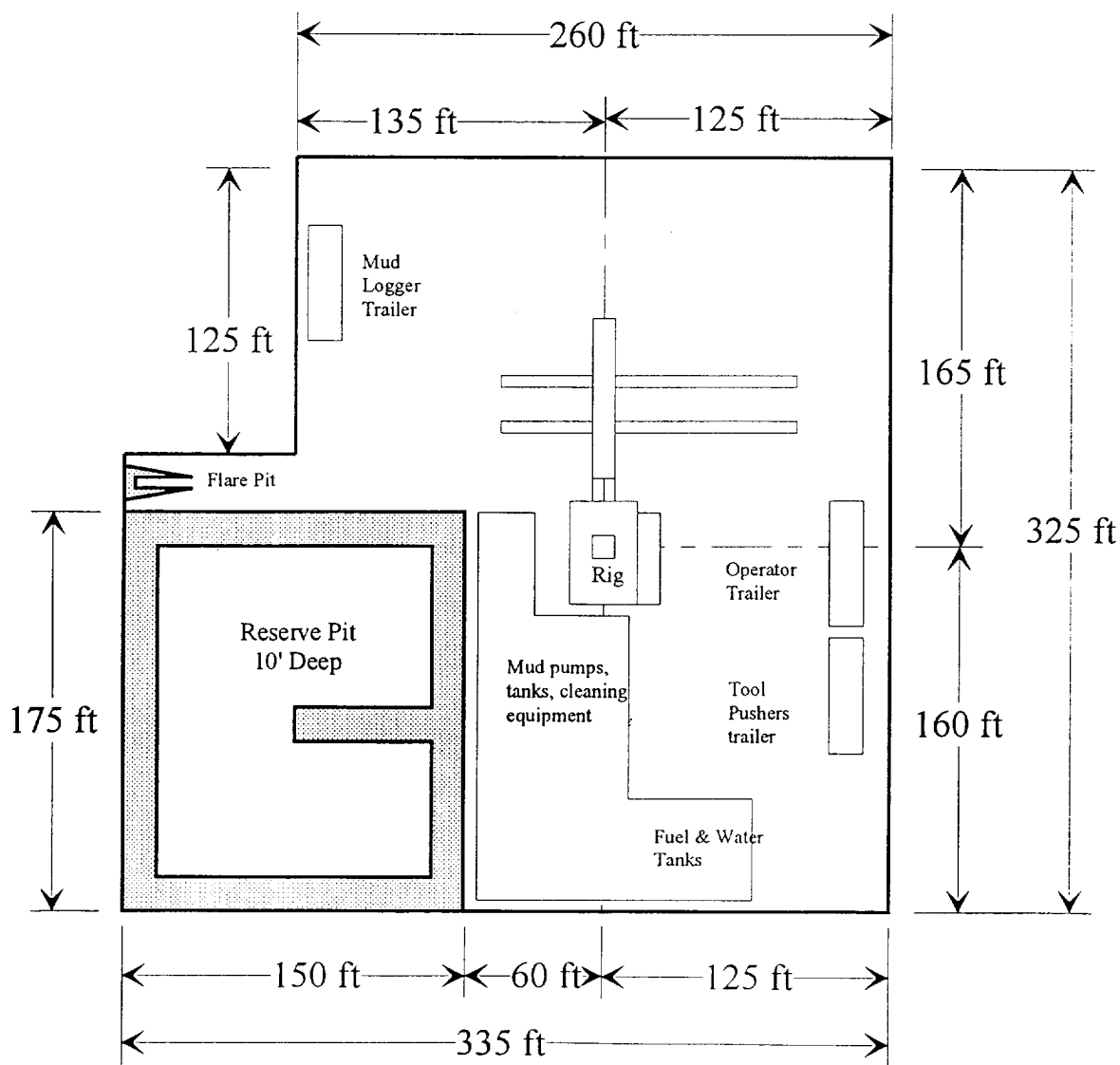
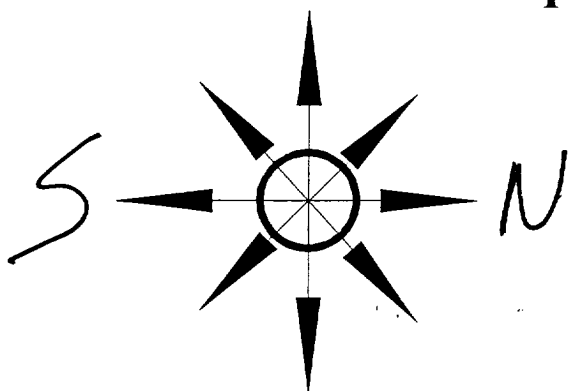
WELL PAD PLAN VIEW ON THE YATES ENGWALL
"RL" FEDERAL #3 LOCATED 990/N AND 840/E
OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 26
EAST, NMPM, CHAVES COUNTY, NEW MEXICO.

| | |
|------------------------|--------------------------|
| Survey Date: 1/26/2000 | Sheet 1 of 1 Sheets |
| Drawn By: Ed Blevins | W.O. Number |
| Date: 1/26/00 | Scale 1" = 50' ENGWALL 3 |

Yates Petroleum Corporation

Location Layout for Permian Basin

Up to 12,000'



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum



Yates Petroleum Corporation

BOP-2

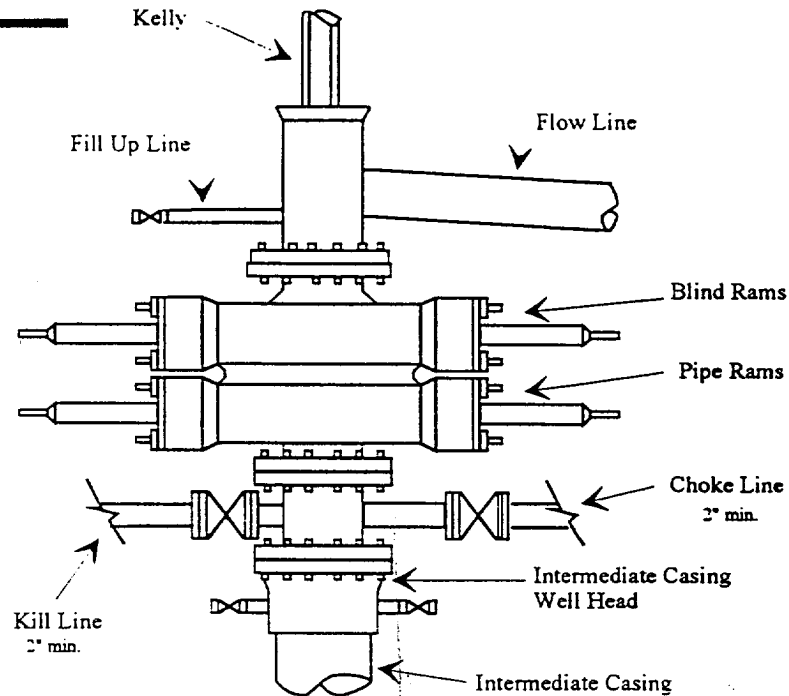
Typical 2,000 psi Pressure System Schematic

Double Ram Preventer Stack

Yates Petroleum Corporation

105 SOUTH 4th STREET
ARTESIA, NEW MEXICO 88210

Engwall RL Federal #3
990' FNL and 840' FEL
Section 4, T9S-R26E
Chaves County, New Mexico
NM-29211



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

