| * .   |   |  |                      |
|---|---|--|----------------------|
| Form 3160-3<br>(August 1999) UNITED<br>UNITED   |   | FORM APP<br>OMB No. 10<br>Expires Novem                  | 04-0136              |
| BUREAU OF LAN   |   | 5. Lease Serial No.<br>NMNM81274                         |                      |
| APPLICATION FOR PERMI   | IT TO DRILL OR REENTER $_{\mathcal{J}}\mathcal{B}\mathcal{H}$   | 6. If Indian, Allottee or Inb                            | e Name               |
| Ta Type of Work: DRILL REENTER  |   | 7. If Unit or CA Agreement.                              | Name and No.         |
| 1b. Type of Well: 🔀 Oil Well 🗖 Gas Well 🗖   | Other 🛛 Single Zone 🗖 Multiple Zone   | 8. Lease Name and Well No<br>THYME APY FEDERA            |                      |
|   | act: ROBERT ASHER<br>E-Mail: basher@ypcnm.com   | 9. API Well No.  | 30-025-33674         |
| Ja. Address<br>105 SOUTH 4TH STREET<br>ARTESIA, NM 88210  | 36. Phone No. (include area code)<br>Ph: 505.748.4364<br>Fx: 505.748.4572   | 10. Field and Pool, or Explo<br>RED TANK<br>BONE SPRINGS |                      |
| At surface     SWNW 2310FNL 990FV     At proposed prod. zone SWNW 2310FNL 990FV   | NL HATTATIO 18793   | Sec 1 T23S R32E M  | and Survey or Area   |
| 14. Distance in miles and direction from nearest town or p<br>APPROX. 41 MILES NW OF JAL, NM  |   |  | 13. State<br>NM      |
| <ol> <li>Distance from proposed location to nearest property or<br/>lease line, fl. (Also to nearest drig. unit line, if any)</li> </ol>  | 16. No. of Acres in Lease<br>479.25   | T7: Spacing Unit dedicated<br>40.00                      | to this well         |
| <ol> <li>Distance from proposed location to nearest well, drillur<br/>completed, applied for, on this lease, ft.</li> </ol>   | 19. Proposed Depth<br>9200 MD   | 20. BLM/BIA Bond No. on                                  | file<br>File         |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.<br>3740 GL  | 22. Approximate date work will start  |  | t <b>, ED</b>        |
|   | 24. Attachments Carisbad  | Contrelled Water Basis                                   |                      |
| <ol> <li>The following, completed in accordance with the requirement.</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest SUPO shall be filed with the appropriate Forest Service)</li> </ol> | 4. Bond to cover the opera<br>Item 20 above).<br>System Lands, the 5. Operator certification                      | itions unless covered by an existir                      | -                    |
| 25. Signature<br>(Electronic Submission)  | Name (Printed/Typed)<br>CLIFTON R. MAY Ph: 505.748.4347   |  | Date<br>01/21/2003   |
|   |   |  |                      |
| Approved by (Signature)<br>/s/ Mary J. Rugwell  | Name (Printed/Typed) // Nary J. Rugwe   | )]]  | Date<br>FEB 2 7 2003 |
| Title<br>FIELD MANAGER<br>Application approval does not warrant or certily the applicar   | CARLSBAD FIELD  | OFFICE   | plicant to conduct   |
| operations thereon.<br>Conditions of approval, if any, are attached.  | APPR  | OVAL FOR 1 YE  | EAR                  |
| Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 12<br>States any false, fictitious or fraudulent statements or represe   | 12, make it a crime for any person knowingly and willfully<br>entations as to any matter within its jurisdiction. | y to make to any department or ag                        | ency of the United   |
| Additional Operator Remarks (see next page)   |   |  |                      |
| For YAT   | nission #17830 verified by the BLM Well Info<br>ES PETROLEUM CORPORATION, sent to th                              | ne Hobbs   |                      |
| CLARED WATER BASSIN HIND THE 11 344   |   | (2003,(031,A0068AE)<br>L'Surject to<br>Requirements a    | MA                   |
| SING MUST BE CIRCULATED   |   | STIPULATIONS   |                      |
| ** REVISED ** REVISED ** RE   | VISED ** REVISED ** REVISED ** REVIS  |  | 'ISED **             |
|   |   | €}-  | ~                    |
|   |   |  |                      |

## Additional Operator Remarks:

A ht-fictos occ

NO REMARK PROVIDED

| District I  |                       |                           |   |                        | State of N    | lew Mexico          |  |           |                | Form C-102                            |
|---|-----------------------|---------------------------|---|------------------------|---------------|---------------------|--|-----------|----------------|---------------------------------------|
| 1625 N. French Dr.,   | Hobbs, NM             | 88240                     | Er , Minerals & Natural Resources Department                                  |                        |               | rtment              |  | Revised A | ugust 15, 2000 |                                       |
| District II<br>811 South First, Arts<br>District III<br>1000 Rie Brazos Rd. |                       |                           | OIL CONSERVATION DIVISION<br>1220 South St. Francis Dr.<br>Santa Fe, NM 87505 |                        |               |                     | Submit to Appropriate District Offic<br>State Lease - 4 Copic<br>Fee Lease - 3 Copic |           |                |                                       |
| <u>District IV</u><br>1220 S. St. Francis I                                 |                       | e, NM 87585               |   |                        |               |                     |  |           | ] AMER         | IDED REPORT                           |
|   | <u> </u>              |                           | <u>ELL LI</u>   |                        |               | CREAGE DEDIC        | ATION PL   | Name      |                | · · · · · · · · · · · · · · · · · · · |
|   | Pl Number<br>25-336   |                           | 5   | <sup>2</sup> Pool Code |               |                     | Red Tank E   |           | g              |                                       |
| * Property Co   | T                     | /                         | 1   |                        |               | rty Name            |  | · · · ·   |                | dl Number                             |
| 1079  | 13                    |                           |   |                        | •             | PY FEDERAL          |  | 10        |                | 10                                    |
| OGRID N   |                       |                           |   |                        |               | tor Name            |  | ·····     | *!             | Elevation                             |
| 025575  | -                     |                           |   | Yate                   | es Petroleu   | um Corporation      |  |           |                | 3740'                                 |
| 02331   |                       |                           |   |                        |               | ce Location         |  |           |                |                                       |
| UL or lat no.   | Section               | Temahip                   | Range   | Let Ida                | Feet from the |                     | Feet from the  | East/W    | est line       | County                                |
| E   | 1                     | 235                       | 32E   |                        | 2310          | North               | 990  | We        | est            | Lea                                   |
| <b></b>   |                       | <u>k</u>                  | <sup>11</sup> B   | ottom Ho               | ole Locatio   | n If Different From | n Surface  |           |                |                                       |
| UL or lot no.   | Section               | Township                  | Range   | Lot Ida                | Fect from the |                     | Feet from the  | East/W    | est line       | County                                |
| <sup>12</sup> Dedicated Acres<br>40   | <sup>13</sup> Joint o | r Infili <sup>14</sup> Co | nsolidation   | Code <sup>15</sup> O   | rder No.      |                     |  |           | I              |                                       |

#### 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

| 16                          |       |   |   |                     | <sup>17</sup> OPERATOR CERTIFICATION<br>I hereby certify that the information contained herein is  |
|-----------------------------|-------|---|---|---------------------|--|
|                             |       |   |   |                     | true and complete to the best of my knowledge and  |
|                             |       |   |   |                     | Clifter R. May   |
|                             |       |   |   |                     |  |
| NM-81274                    |       |   |   |                     | Clifton R. May   |
| 11WF-0 ( <i>21</i> <b>4</b> | 2310' |   |   |                     | Regulatory Agent   |
| 1                           |       |   |   |                     | Title  |
| l                           |       |   |   |                     | 1/16/2003  |
| 990'                        | כ     |   |   |                     | Dute   |
|                             |       |   |   |                     | <sup>18</sup> SURVEYOR CERTIFICATION<br>I hereby certify that the well location shown on this plan |
|                             |       |   |   | 03                  | was plotted from field notes of actual surveys made by   |
|                             |       |   | ( | LED<br>HUDDS<br>OCD | me or under my supervision, and that the same is true  |
|                             |       |   | Ì | HODO<br>HODO        | and correct to the best of my belief.  |
| ł                           |       | • |   | -                   | REFER TO ORIGINAL PLAT   |
|                             |       | L |   | +                   | Date of Survey   |
|                             |       |   |   |                     | Signature and Seal of Professional Surveyor.   |
|                             |       |   |   |                     |  |
|                             |       |   |   |                     | ·  |
| ļ                           |       |   |   |                     |  |
|                             |       |   |   |                     | Certificate Number   |
|                             |       |   | ] | 1                   |  |

### YATES PETROLEUM CORPORATION Thyme APY Federal #10 2310' FNL and 990' FWL Section 1-T23S-R32E Lea County, New Mexico

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

| Rustler        | 1260' | Cherry Canyon | 5990' |
|----------------|-------|---------------|-------|
| Top of Salt    | 1295' | Bone Spring   | 8800' |
| Bottom of Salt | 4680' | TD            | 9200' |
| Delaware       | 4968' |               |       |

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

Water: 250' – 750' Oil or Gas: 8800'

3. Pressure Control Equipment: BOPE will be installed on the 13 3/4" 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)

| Hole Size | <b>Casing Size</b> | Wt./Ft | Grade | Coupling |            | Length |
|-----------|--------------------|--------|-------|----------|------------|--------|
| 14 3/4"   | 11 3/4"            | 42#    | J-55  | ST&C     | 0-1270'    | 1270'  |
| 11"       | 8 5/8"             | 32#    | J-55  | ST&C     | 0-4200'    | 4200'  |
| 12 ¼"     | 8 5/8"             | 32#    | HC-80 | ST&C     | 4200-4810' | 610'   |
| 7 7/8     | 5 ½"               | 17#    | N-80  | LT&C     | 0-2000'    | 2000'  |
| 7 7/8     | 5 ½"               | 17#    | J-55  | LT&C     | 2000-3000' | 1000'  |
| 7 7/8     | 5 ½"               | 15.5#  | J-55  | LT&C     | 3000-7000' | 4000'  |
| 7 7/8     | 5 ½"               | 17#    | J-55  | LT&C     | 7000-8500' | 1500'  |
| 7 7/8     | 5 ½"               | 17#    | N-80  | LT&C     | 8500-9200' | 700'   |

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

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 company to do the testing. Also, the bottom hole pressure in this field is proven to be near 1000 psi. A shut in surface pressure would be less than 1000 psi. We feel that a 1000 psi test will demonstrate that the BOPE is functioning properly, and in the unlikely event of a gas influx that the BOPE would be sufficient to control the well.

#### Thyme APY Federal #10 Page 2

#### B. CEMENTING PROGRAM:

| Surface Casing:      | 550 sy Pacasattar I ito "C" w/ 1/# Collocal + 29/ CaCio (VI D 4 of WT      |
|----------------------|--|
| Canade Casing.       | 550 sx Pacesetter Lite "C" w/ 1/4# Cellocel + 3% CaCl2 (YLD 1.84 WT        |
|                      | 12.4) + 250 sx Class "C" w/2% CaCl2 (YLD 1.32 WT 14.8). Cement             |
|                      | calculated to circulate to surface.  |
|                      |  |
| Intermediate Casing: | 1500 sx Pacesetter Lite "C" w/ ¼# Cellocel + 3% CaCl2 (YLD 1.32            |
|                      |  |
|                      | WT 14.8) + 250 sx Class "C" w/2% CaCl2 (YLD 1.32 WT 14.8).                 |
|                      | Cement calculated to circulate to surface.                                 |
|                      |  |
| Production Casing:   | 1" Stage: 250 sx "H" w/8# sx CSE + 0.6% CF-14 + 5# sx Gilsonite            |
|                      | (YLD 1.75 WT 13.6). Cement calculated to 8000' DV tool set @               |
|                      | approximately 8000'.   |
|                      |  |
|                      | 2 <sup>nd</sup> Stage: 650 sx Pacesetter Lite "C" w/5# sx Gilsonite, ¼# sx |
|                      |  |
|                      | Cellocel + 0.5% CF-14 (YLD 1.84 WT 12.7) + 150 sx "H" w/0.5% CF-           |
|                      | 14 (YLD 1.78 WT 13.6). Cement calculated to tie back to                    |
|                      | intermediate casing 100'.  |
|                      | <b>G</b> · • • •   |
|                      |  |

## 5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

| <u>Interval</u> | Туре             | <u>Weight</u> | Viscosity | Fluid Loss |
|-----------------|------------------|---------------|-----------|------------|
| 0-1270'         | FW GEL           | 8.6-9.6       | 32-36     | N/C        |
| 1270'-4810'     | Brine            | 10.0-10.2     | 28        | N/C        |
| 4810'-9200'     | Cut Brine/Starch | 8.9-9.1       | 30        | <15/cc     |

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: Every 20' from surface to 4000', 10' from 4000' to TD.
 Logging: CNL/LDT from TD to casing, w/ GR-CNL up to surface, DLL w/RXO from TD to casing; CMR over selected intervals.
 Coring: None anticipated
 DST's: As warranted.

7. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

| Anticipated | BHP:  |           |                       |          |
|-------------|-------|-----------|-----------------------|----------|
| From:       | 0     | TO: 1270' | Anticipated Max. BHP: | 2062 PSI |
| From:       | 1270' | TO: 4810' | Anticipated Max. BHP: |          |
| From:       | 4810' | TO: TD    | Anticipated Max. BHP: |          |

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None.

Maximum Bottom Hole Temperature: 140 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 20 days.

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# Lates Petroleum Corporatio

BOP-3

Typical 3.000 psi Pressure System Schematic Annular with Double Ram Preventer Stack



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

