|   |  | or Err. Odd  | יטאו טנ                              | · <u> </u>  | •  |  |                             |  |  |
|---|--|--|--------------------------------------|---|--|--|-----------------------------|--|--|
| Form 3160-3   |  | PROPERTY   | NO                                   | 18793   | J<br>PLICATE•                                | FORM   | FORM APPROVED               |  |  |
| (July 1992)   | UNI  | T POOL CODE  | :                                    | 51683   | ions on                                      | OMB NO   | . 1004-0136                 |  |  |
|   | DEPARTMEN  | TEFF. DATE   | 81                                   | 2/96  | ,<br>[                                       | 5. LEASE DESIGNATI                                   | bruary 28, 1995             |  |  |
|   | BUREAU OI  | API NO. 3  |                                      | 77.77   |  | NM-81274   | ON AND BERIAL NO.           |  |  |
| APPLI   | CATION FOR F   | PL   |                                      | 723 33527   |  | 6. IF INDIAN, ALLOT                                  | TER OR TRIBE NAME           |  |  |
| la. TYPE OF WORK  |  |  |                                      |   |  | 7. UNIT AGREEMENT                                    | V.                          |  |  |
| b. TYPE OF WELL   | LL 🖾   | DEEPEN   | LJ                                   |   |  | . OHII AGEDERAN                                      | PAME                        |  |  |
| OIL WELL W  2. NAME OF OPERATOR                                     | ELL OTHER  |  |                                      | INGLE MULTI   | PLE  | 8. FARM OR LEASE NAME                                |                             |  |  |
|   | UM CORPORATION   |  |                                      |   | ŀ  | Thyme APY  | Federal #2                  |  |  |
| 3. ADDRESS AND TELEPHONE NO.  |  |  |                                      |   |  |  |                             |  |  |
| 105 South Fou to Location of Well (Re                               | rth Street, Ar   | tesia, NM 8  | 88210                                | (505) 748-147   | <u> </u>                                     | 10. FIELD AND POOF                                   | , OR WILDCAT                |  |  |
| At surface 1650' FNL and  |  | d in accordance wi   | ith any i                            | state requirements.   | ŀ  | Red Tank Bo  | ne Spring                   |  |  |
| At proposed prod. zon   |  | 11 -   | .1 /                                 | )   |  | AND SURVEY OR  | AREA                        |  |  |
| Same  |  | Uni  |                                      |   |  | Sec. 1-T23S  | -R32E                       |  |  |
| 14. DISTANCE IN MILES   |  |  | ST OFFIC                             | ·D*   |  | 12. COUNTY OR PARI                                   |                             |  |  |
| 15. DISTANCE FROM PROPU   |  | New Mexico   | 16. N                                | O. OF ACRES IN LEASE  | 17. NO. O                                    | Lea<br>F ACRES ASSIGNED                              | l NM                        |  |  |
| LOCATION TO NEAREST<br>PROPERTY OR LEASE L<br>(Also to nearest drig | INE, FT.   | ż  | 4                                    | 79.25   |  | 118 WELL 40  |                             |  |  |
| 18. DISTANCE FROM PROP<br>TO NEAREST WELL, DI                       | OSED LOCATION® RILLING, COMPLETED.   |  | 19. rı                               | ROPOSED DEPTH   | 1 _  | TY OR CABLE TOOLS                                    |                             |  |  |
| or applied for, on thi  |  |  | <u> </u>                             | 9150'   | Rot  |  | WORK WILL START®            |  |  |
| 3741' GR  |  |  |                                      |   |  | ASAP   | WORK WILL START             |  |  |
| 23.   |  | PROPOSED CAS   | ING AN                               | D CEMENTING PROGRA  | \M   | 7 7. 3   |                             |  |  |
| SIZE OF HOLE  | GRADE, SIZE OF CASING  | WEIGHT PER E   | FOOT                                 | SETTING DEPTH   | T  | QUANTITY OF CE                                       | MENT                        |  |  |
| 17 1/2"   | 13 3/8"  | 48#  |                                      | 1150'   | 550  | sacks circul   | ated                        |  |  |
| 12 1/4"   | 8 5/8"   | 32#  |                                      | 4650'   | 175 <u>0</u>                                 | sacks (tie b   | ack)                        |  |  |
| 7 7/8"  | 5 1/2"   | 15.5# & 17   | 7#                                   | TD  | 1050   | sacks (tie b   | ack)                        |  |  |
| formations. Approximately commercial, p and stimulate  MUD PROGRAM: | Approximately 1650' of interioduction casion of the case of the ca | 1150' of sumediate cased on the second of th | rface<br>sing<br>run a<br>n.<br>4650 | ll and test the casing will be will be set and nd cemented with ', Cut Brine, S | e set an<br>d cement<br>th adequ<br>Starch t | d cement cir<br>circulated.<br>ate cover, p<br>o TD. | culated.<br>If<br>erforated |  |  |
| BUPE PRUGRAM:   | BOPE WILL be   | nippled up (   | on th                                | e 13 3/8"casing   |  |  | or operationa               |  |  |
|   |  | * .  |                                      |   | i Stipulati                                  | merks and  |                             |  |  |
| N ABOVE SPACE DESCRIB   | E PROPOSED PROGRAM:  | If proposal is to deenen   | ı, give dat                          | a on present productive zone  | heappropriate                                | new productive zone                                  | If proposal is to drill or  |  |  |
| deepen directionally, give perti                                    | nent data on subsurface locat  | ons and measured and   | true vertic                          | cal depths. Give blowout prev   | enter program,                               | if any.  |                             |  |  |
| RIGNED CL   | the R. M   | ay "   | ITLE                                 | Regulatory Age  | ant  | DATE 6   | -20-96                      |  |  |
| (This space for Fede  | ral or State office use)   |  |                                      |   |  |  |                             |  |  |
|   | ,  |  |                                      |   |  |  |                             |  |  |
| ••  | •  | applicant holds legal or o   | equitable t                          | APPROVAL DATE   | t lease which wo                             | ould entitle the applicant t                         | o conduct operations there  |  |  |
| CONDITIONS OF APPROVAL  |  |  |                                      | , F.  |  |  |                             |  |  |
| /S/   | TIMOTHY J. BU  | RKE  | e. Al                                | Sting   AREA MA   | NACER  | DATE JUL 2   | 4 1996                      |  |  |
|   |  | *See Instr   | uctions                              | On Reverse Side   |  |  | 7                           |  |  |

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

District L PO Box 1980, Hobba, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztoc, NM 87410

District IV

PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-102 Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

TALLANDED DED

|                  |              | N IT           | 71 Y Y C          |   |                       |                  |                 | لــا                                    | AMENDED RE  | POI     |
|------------------|--------------|----------------|-------------------|---|-----------------------|------------------|-----------------|---|---|---------|
| <del></del>      | API Numb     | WE             | <u> </u>          |   |                       | REAGE DED        | ICATION P       | LAT                                     |   |         |
| 30-025-33529     |              |                | a                 | Pool Coc                                |                       | ED TANK BO       | Pool N          | ame                                     |   |         |
| Property         |              | 17921          |                   | 5168                                    |                       |                  | ONE JAKIN       | 45                                      |   |         |
| 18-79            | _            |                |                   | THYME ".                                | 'Property APY" FEDERA |                  |                 | 'Well Number                            |   |         |
| OCRID            | No.          |                |                   | 111111111111111111111111111111111111111 | Operator              |                  |                 |   | 2   |         |
| 02557            | 15           |                | YAT               | ES PETR                                 | OLEUM CORPO           |                  |                 |   | * Elevation 3741                                  |         |
|                  |              |                |                   |   |                       | Location         |                 |   |   |         |
| UL or lot no.    | Section      | Township       | Range             | Lot Ida                                 | Feet from the         | North/South line | Feet from the   | East/West b                             | ine County  |         |
| · G              | 1            | 23S            | 32E               | <u> </u>                                | 1650                  | NORTH            | 1650            | EAST                                    | LEA   |         |
| UL or lot po.    | l code       | T              | 11 Bot            |   | le Location I         | f Different Fr   | om Surface      | *************************************** |   |         |
| CLOFICE BO.      | Section      | Township       | Range             | Lot Idn                                 | Feet from the         | North/South line | Feet from the   | East/West is                            | ine County  |         |
| 12 Dedicated Acr | res 13 Joint | or Infill 14 ( | l<br>Consolidatio | on Code 14 (                            | Order No.             |                  |                 |   |   |         |
| 40               |              |                |                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Mucr Hu.              |                  |                 |   |   |         |
| NO ALLO          | WABLE '      | WILL BE A      | ASSIGNE           | D TO TH                                 | IS COMPLETION         | ON UNTIL ALL     | INTEDESTS U     | AVE DEEN                                | 1 COVICOI D                                       |         |
| <u></u>          |              | OR A           | NON-ST            | ANDARD                                  | UNIT HAS BE           | EN APPROVED      | BY THE DIVI     | iave beer<br>Ision                      | I CONSOLIDATI                                     | ED      |
| 16               |              |                |                   |   |                       |                  |                 |   | ERTIFICATI  | <u></u> |
|                  |              |                |                   |   |                       |                  | I hereby certi  | by that the infor                       | mation contained herei                            | a ie    |
|                  |              |                |                   |   |                       |                  | true and comp   | plese so the best                       | of my browledge and                               | beliq   |
|                  |              |                |                   |   | 1650                  |                  |                 |   |   |         |
|                  |              |                |                   |   | <u> </u>              |                  | 100-            | 110                                     |   |         |
|                  |              |                |                   | <del></del>                             | <del>)</del>          |                  | II Uly          | Un K                                    | . May   |         |
|                  |              |                |                   |   |                       | — 1650' ——       | 1 ognature 1    |   | $\sim$  |         |
|                  |              |                |                   | 【//                                     | ///                   | 1630             | Printed Name    | on R. Mag                               | <u>/</u>  |         |
|                  | 1            |                |                   | V/                                      | ///                   |                  | ()              | tory Age                                | ent   |         |
|                  |              |                |                   | Jum-                                    | 81274                 |                  | Title           | ,                                       |   |         |
|                  |              |                |                   |   | 27/                   |                  | 6-20-9<br>Date  | 10                                      | · · · · · · · · · · · · · · · · · · ·             |         |
|                  |              | <del></del>    | <del></del>       | -                                       |                       |                  | HOTIDAG         | TUOD O                                  |   |         |
|                  |              |                |                   |   |                       |                  | "SUKV           | EYOR CI                                 | ERTIFICATIO                                       | NC      |
|                  |              |                |                   |   |                       |                  | was plotted fro | am field moves or                       | ocation shown on this p<br>Cactual surveys made b | -       |
|                  |              |                |                   |   |                       |                  | ME OF WILDER M  | ry supervision, a<br>the best of my l   | and that the same is on                           | y<br>id |
|                  |              |                |                   |   |                       |                  |                 | September 1                             | reig.<br>HQL                                      |         |
|                  |              | ···            |                   |   |                       |                  | Date of Survey  | A SOUTH E                               | 100   |         |
|                  |              |                |                   |   |                       |                  | Signature of    | وصا فرنه امروس                          | and Shakes 14                                     |         |
|                  |              |                |                   |   |                       |                  |                 | 19/00                                   | 181 1   |         |
|                  |              |                |                   |   |                       |                  | RESISTR         | 3644                                    | ')   <sub>s</sub>                                 |         |
|                  |              |                |                   |   |                       |                  |                 |   | 12  |         |
|                  | 1            |                |                   | 1                                       | 1                     |                  | / <b>*/_</b> \  | - An - 1/1                              | 1081  |         |

## YATES PETROLEUM CORPORATION THYME "APY" FEDERAL #2 1650' FNL AND 1650' FEL SECTION 1-T23S-R32E LEA COUNTY, NEW MEXICO

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

| Rustler Top of Salt Bottom of Salt Delaware | 1260'<br>1295'<br>4680'<br>4968' | Bone Spring<br>TD | 8800'<br>9150' |
|---|----------------------------------|-------------------|----------------|
| Cherry Canyon                               | 5990'                            |                   |                |

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 3/8" casing and rated for 3M 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, 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 | Casing Size | Wt./Ft | <u>Grade</u> | <u>Thread</u> | Coupling | <u>Interval</u> | <u>Length</u> |
|-----------|-------------|--------|--------------|---------------|----------|-----------------|---------------|
| 17 1/2"   | 13 3/8      | 48#    | J55          | 8R            | ST&C     | 0-1150′         | 1150′         |
| 12 1/4"   | 8 5/8       | 32#    | J55          | 8R            | ST&C     | 0-4200'         | 4200'         |
| 12 1/4"   | 8 5/8       | 32#    | HC80         | 8R            | ST&C     | 4200-4650       | 450'          |
| 7 7/8"    | 5 1/2       | 17#    | N80          | 8R            | LT&C     | 0-2000'         | 2000'         |
| 7 7/8"    | 5 1/2       | 17#    | J55          | 8R            | LT&C     | 2000-3000       | 1000'         |
| 7 7/8"    | 5 1/2       | 15.5#  | J55          | 8R            | LT&C     | 3000-7000       | 4000'         |
| 7 7/8"    | 5 1/2       | 17#    | J55          | 8R            | LT&C     | 7000-8500       | 1500'         |
| 7 7/8"    | 5 1/2       | 17#    | N80          | 8R            | LT&C     | 8500-9150       | 650'          |

## THYME "APY" FEDERAL #2 Page 2

### B. CEMENTING PROGRAM:

Surface casing: 550 sx. Pacesetter Lite "C" w/ 1/4# Cellocel & 3% CaClz (wt. 12.4 ppg. Yield 1.84 ft3) + 250 sx. Class "C" w/ 2% CaClz. (wt. 14.8 ppg., Yield 1.32 ft3) Cement calculated to circulate to surface.

Intermediate Casing: 1500 sx. Pacesetter Lite "C" w/ 1/4# Cellocel + 3% CaCl2. (wt. 14.8 ppg. Yield 1.32 ft 3) + 250 sx. Class "C" w/2% CaClz. (wt. 14.8 ppg. Yield 1.32 ft3) Cement calculated to circulate to surface.

Production Casing: 1st Stage: 250 sx. "H" w/8# sack CSE, + 0.6% CF-14 +5# sack Gilsonite (wt. 13.6 ppg Yield 1.75 ft3) Cement calculated to 8000' DV tool set at approx. 8000 ft.

2nd Stage: 650 sacks pacesetter lite "C" w/5# sack Gilsonite, 1/4# sack Cellocel, + 0.5% CF-14.(wt. 12.7 ppg Yield 1.84 ft3) + 150 sacks "H" w/0.5% Cf-14 (wt. 13.6 ppg Yield 1.78 ft3). Cement calculated to tie back to intermediate csng. 100'.

## 5. Mud Program and Auxiliary Equipment:

| <u>Interval</u> | <u>Type</u>       | Weight    | <u>Viscosity</u> | Fluid Loss |
|-----------------|-------------------|-----------|------------------|------------|
| 0-1150          | FWGEL             | 8.6 - 9.6 | 32-36            | N/C        |
| 1150-4650       | Brine             | 10.0-10.2 | 28               | N/C        |
| 4650-9150       | cut brine, starch | 8.9 - 9.1 | 30               | < 15cc     |

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 4400', 10' from 4400' to TD.

Logging: CNL/LDT from TD to casing with GR-CNL up to surface; DLL w/RXO

from TD to casing; CMR over slected intervals

Coring: None anticipated

DST's: Any tests will be based on the recommendations of the well site geologist

as warranted by drilling breaks and shows

# THYME "APY" FEDERAL #2 Page 3

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

**Anticipated BHP:** 

From: 0 TO: 1150 Anticipated Max. BHP: 250 PSI Anticipated Max. BHP: 2062 PSI Anticipated Max. BHP: 3800 PSI Anticipated Max. BHP: 3800 PSI

Abnormal Pressures Anticipated: None

Lost Circulation zones anticipated: None

H2S Zones Anticipated: None

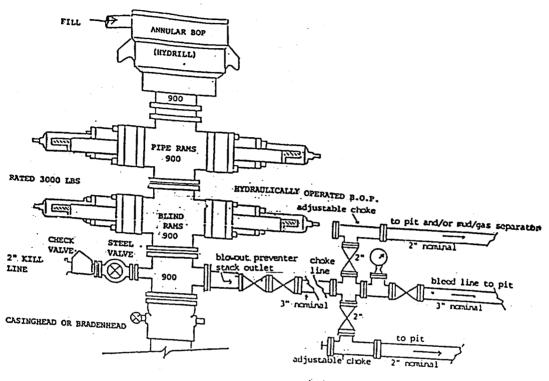
Maximum Bottom Hole Temperature: 140F

### 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.

# YATES DETROLEUM CORPORATION

Thyme APY Federal #2 1650' FNL and 1650' FEL Section 1-T23S-R32E Lea County, New Mexico Exhibit B



typical choke manifold assemby for 14 rated working pressure service-surface installation

#### EXHIBIT B

# THE FOLLOWING CONSTITUES THE MINIMUM BLOWOUT PREVENTER REQUIREMENTS FOR 3000 PSI WP SYSTEMS

- All preventers to be hydraulically operated with secondary manual controls installed prior to drilling out from under casing.
- 2. Choke outlet to be a minimum of 3" diameter.
- 3. Kill line to be of all steel construction of 3" minimum diameter.
- 4. All connections from operating manifolds to preventers to be all steel. Hole or tube to be a minimum of one inch in diameter.
- 5. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate the B.O.P.'s.
- All connections to and from preventer to have a pressure rating equivalent to that of the B.O.P.'s.
- 7. Inside blowout preventer to be available on rig floor.
- 8. Operating controls to be located a safe distance from the rig
- 9. Hole must be kept filled on trips below intermediate casing.