Form 3160-3 (August 1999)

Jiand Avenue Artesia NM 88210 DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT TION FOR PERMIT N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Artesia, NM 88210

OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

NM LC-028990-B

ALIG 1 7 2001

| APPLICATION FOR PERMIT TO I | DRILL OR REENTER | 6. | . If Indian, Allottee or Trib | e Name | |
|---|--|-------------------------|--|--|--|
| APPLICATION FOR PERMIT TO | 066 | AMTERM | Not Applic | able | |
| 1a. Type of Work: X DRILL R | REENTER | | | 7. If Unit or CA Agreement, Name and No. | |
| | \ | 32575 | | | |
| Not | | \ \ | . Lease Name and Well No |). | |
| b. Type of Well: Oil Well Gas Other Well | Single Zone | | eek AL Federal Co | m #2 0 | |
| 2. Name of Operator 26575 | | 1/2 | . API Well No. | | |
| Yates Petroleum Corporation Hackhe | try: Morrow No | £ 170 | 0-015-32 | 2886 | |
| 3A. Address 105 South Fourth Street | 3b. Phone No. (include area code | e) 10 |). Rield and Pool, or Explo | ratory | |
| Artesia, New Mexico 88210 | (505) 748-437 | 2 1 | 1-1-24 84 | | |
| 4. Location of Well (Report location clearly and in accordance with a | ny State requirements.*) | 11 | 11. Sec., T., R., M., or Blk, and Survey or Area | | |
| At surface SENE 1980' FNL a | nd 1200' FEL Unit H | | | | |
| | as Above Secretary's | 8 Polasia Se | c 25 T18S R30E M | er NMP | |
| 14. Distance in miles and direction from nearest town or post office* | | 12 | 2. County or Parish | 13. State | |
| APPROXIMATELY 8 MILES SW OF LOCO HILLS, | NM | Ed | ldy | New Mexico | |
| 15. Distance from proposed* location to nearest | 16. No. of Acres in lease | 17. Spacing Unit de | dicated to this well | | |
| property or lease line, ft. (Also to nearest drig, unit line, if any) | 560.00 | | 202.22 | | |
| | 19. Proposed Depth | 20. BLM/BIA Bond | 320.00 | | |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2000' | 12250 MD | 20. BLIM/BIA BONG | I No. on lile | | |
| | 12230 WD | | | | |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) | 22. Approximate date work will | start* 23 | Estimated duration | | |
| 3588 GL | ASAP | ASAP 45 DAYS | | S | |
| | 24. Attachments | Staffen Confro | Red Water Reals | | |
| The following, completed in accordance with the requirements of Onsh | ore Oil and Gas Order No. 1, shall be | attached to this forn | n: | · · · · · · · · · · · · · · · · · · · | |
| 1. Well plat certified by a registered surveyor. | 4. Bond to cove | r the operations uple | ess covered by an existing | hand on file (see | |
| 2. A Drilling Plan. | Item 20 above | | 255 covered by all existing | bond on the (see | |
| 3. A Surface Use Plan (if the location is on National Forest System Lar | | , | | | |
| SUPO shall be filed with the appropriate Forest Service Office. | , | | n and/or plans as may be re | aguired by the | |
| | authorized off | | randroi pians as may be re | quired by the | |
| 25. Signature | Name (Printed/Typed) | | Date | | |
| Wolffing & Callongo | Debbie L. Caffall | | Date | 6/9/2005 | |
| Title: | Dobbie E. Garian | - | | 0/9/2003 | |
| Regulatory Agent / Land Department de | bbiec@ypcnm.com | | | | |
| Approved by (Signature) | Name (Printed/Typed) | | Date | - | |
| ISI STEPHEN L. I-USBER | 151 STEPA | 4511 1. FI | SSPRG- AUG | 1 1 2005 | |
| Title | Office | | | 1 I I 2000 | |
| ACTING STATE DIRECTOR | | u state of | | | |
| Application approval does not warrant or certify that the applicant hold | s legal or equitable title to those right | ts in the subject lease | which would entitle the ar | plicant to conduct | |
| operations thereon. Conditions of approval, if any, are attached. | | APPROVA | AL FOR 1 YE | EAR | |
| | | | | | |
| Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as | a crime for any person knowingly an to any matter within its jurisdiction. | d willfully to make to | any department or agency | of the United | |
| • | , j | | | | |

*(Instructions on reverse)

Previously Approved

5e 17 -

WITNESS: 1338 CEMENT JOB

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

1625 N. French Dr., Hobbs, NM 68240

DISTRICT II

STATE OF THE MEATER

Revised March 17, 1999 Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

811 South First, Artesia. NM 88210 DISTRICT III 1000 Rio Brazos Rd., Azlec, NM 87410 DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87805

OIL CONSERVATION DIVISION P.O. Box 2088

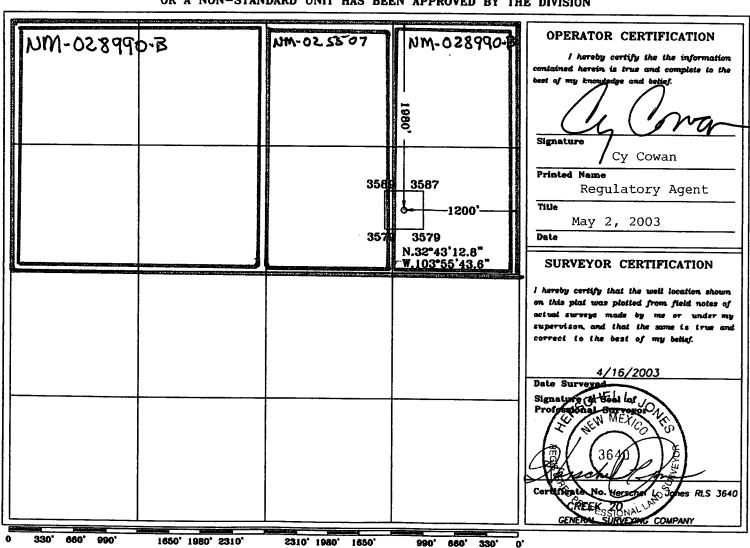
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| API | Number | | | Pool Code | Н | ack berry | Pool Name Morrow | Nerth | - <u>, , , , , , , , , , , , , , , , , , ,</u> |
|--------------------|---------|--------------|---|--|-----------------|-------------------|------------------|-------------------|--|
| Property Code | | | • • | Property Name CREEK "AL" FEDERAL COM. | | | | Well Number 20 | |
| ogrid no 025575 | D. | | Operator Name YATES PETROLEUM CORPORATION | | | Elevation 3588 | | | |
| | | | | | Surface Loc | ation | | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| Н | 25 | 18S | 30E | | 1980 | NORTH | 1200 | EAST | EDDY |
| | | | Bottom | Hole Loc | cation If Diffe | rent From Sur | face | | · |
| UL or lot No. | Section | Township | Range | Lot idn | Feet from the | North/South line | Feet from the | East/West line | County |
| Dedicated Acre | s Joint | or infill Co | nsolidation | Code Or | der No. | | | | |
| 320 ' | | | | 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



YATES PETROLEUM CORPORATION Creek AL Federal Com. #20

1980' FNL & 1200' FEL Section. 25 -T18S-R30-E Eddy County, New Mexico

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

| Rustler | 485' | Dolomite | 8300' |
|--------------|-------|----------|--------|
| Tansill | 1800' | Wolfcamp | 9570' |
| Yates | 1910' | Strawn | 10750' |
| Seven Rivers | 2350' | Atoka | 11075' |
| Queen | 3075' | Morrow | 11470' |
| Grayburg | 3560' | Chester | 12120' |
| Deláware | 4600' | TD | 12250' |
| Bone Spring | 5820' | | |

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

Water:

Approx 250' - 350'

Oil or Gas: All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 9 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:

- 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> | Wt./Ft | <u>Grade</u> | Coupling | <u>Interval</u> | <u>Length</u> |
|------------------|--------------------|--------|--------------|----------|-----------------|---------------|
| 17 ½" | 13 3/8" | 48# | H-40 | ST&C | 0-700' | 700' |
| 12 1⁄4" | 9 5/8" | 36# | J-55 | ST&C | 0-4000' | 4000' |
| 8 ¾" | 7" | 29# | P-110 | LT&C | 0-100' | 100' |
| 8 ¾" | 7" | 26# | L-80 | LT&C | 100'-8600' | 8500' |
| 8 ¾" | 7" | 26# | HCP-110 | LT&C | 8600'-11000' | 2400' |
| 8 ¾" | 7" | 29# | P-110 | LT&C | 11000'-12250' | 1250' |

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

Creek AL Federal Com. #20 Page 2

B'. CEMENTING PROGRAM:

Surface casing:

400 sx Lite (YLD 2.0 WT 12.5) Tail in w/ 250 sx Class "C"

+ 2% CaCL2 (YLD 1.32 WT 14.8).

Intermediate Casing:

Lead with 1100 sx Lite (YLD 2.0 WT 12.5); Tail in w/250 sx Class "C"

+ 2% CaCL2 (YLD 1.32 WT 14.8).

Production Casing:

TOC-3500'; Lead with 600 sx Lite (YLD 2.0 WT. 12.5). Tail in w/ 500 sx

Super "C" (YLD 1.62 WT 13.2)

5. Mud Program and Auxiliary Equipment:

| <u>Interval</u> | _Type | <u>Weight</u> | Viscosity | Fluid Loss |
|-----------------|--------------------------|---------------|-----------|------------|
| 0-700' | FW Gel/Paper | 8.6-9.0 | 32-36 | N/C |
| 700'-4000' | Brine | 10.0-10.2 | 28 | N/C |
| 4000'-11000' | Cut Brine | 8.8-9.5 | 28 | N/C |
| 11000'-12250' | S Gel/Starch/Drispac/KCL | 9.5-10.0 | 32-40 | <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: 30' samples to 5000'. 10' samples 5000' to TD.

Logging: Platform HALS

Coring: Sidewall cores as warranted.

DST's: As warranted.

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

Anticipated BHP:

| From: | 0 | TO: | 700' | Anticipated Max. BHP: | 300 | PSI |
|-------|-------|-----|-------|-----------------------|------|-----|
| From: | 700' | TO: | 4000' | Anticipated Max. BHP: | 1700 | PSI |
| From: | 4000' | TO: | TD | Anticipated Max. BHP: | 6100 | PSI |

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None

8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 30 days to drill the well with completion taking another 15 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN Creek AL Federal Com. #20

1980' FNL & 1200' FEL Section. 25 -T18S-R30-E Eddy 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.

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 8 miles southwest of Loco Hills, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go east of Artesia on Highway 82 to Highway 360. Turn right on 360 and go to Duval Shaft Road (CR-251). Turn left on Duval Shaft Road and go to Grubbs Road (CR-250). Turn right on Grubbs road and go approx. 3 miles. Turn left here and go approx. 0.8 of a mile. The new road will start here going east.

2. PLANNED ACCESS ROAD.

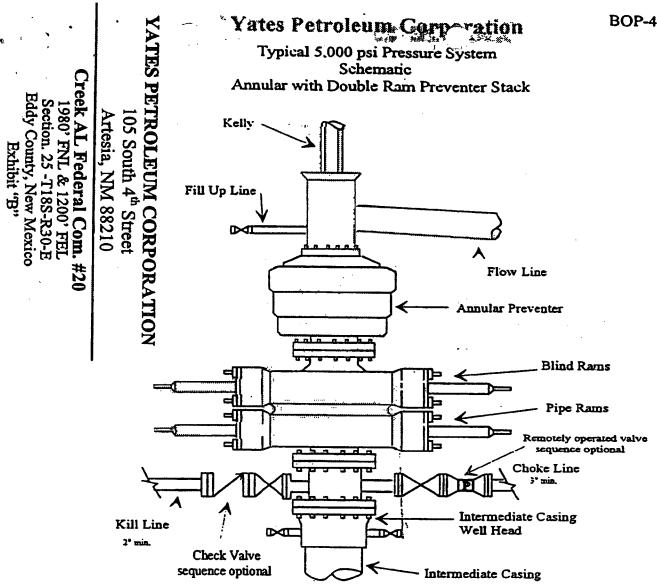
- A. The proposed new access will go east for approximately 200 feet to the southwest corner of the drilling pad. The road will lie in a west to east direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Traffic turnouts may 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

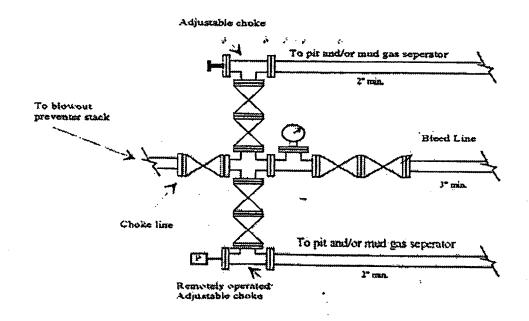
- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

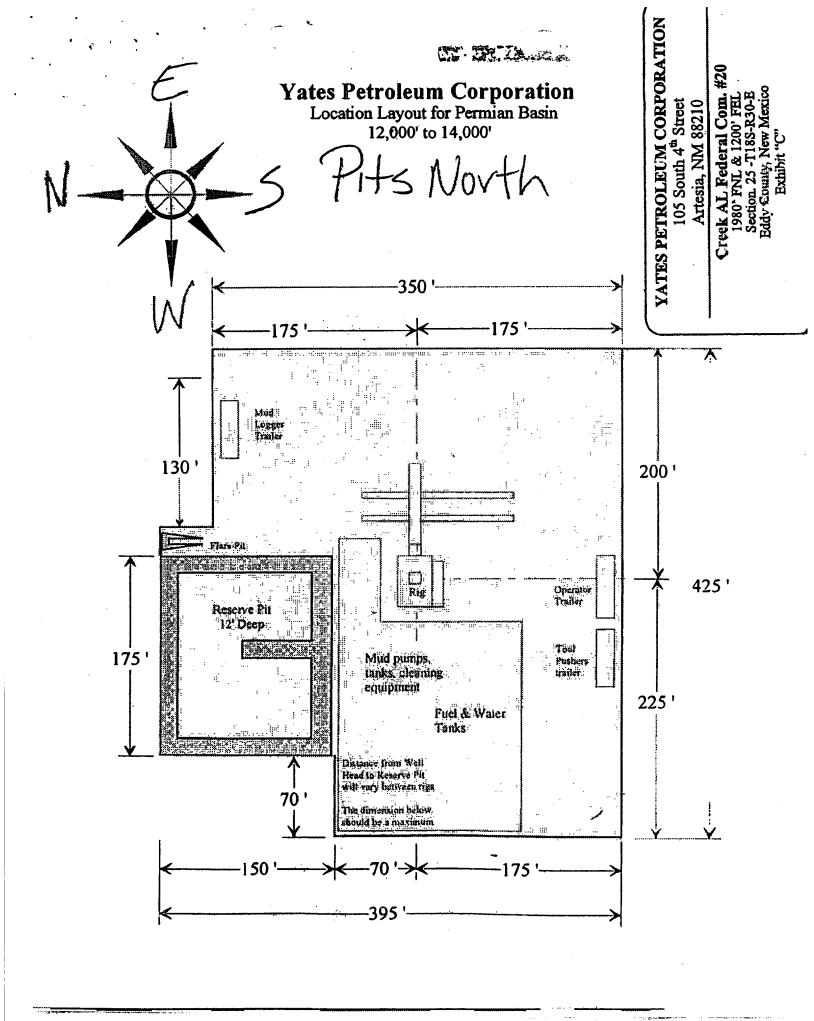
4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- 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.



Typical 5,000 psi choke manifold assembly with at least these minimum features





CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

YATES PETROLEUM CORPORATION

Well Name & No.

20 - CREEK AL FEDERAL COM

Location:

1980' FNL & 1200' FEL - SEC 25 - T18S - R30E - EDDY COUNTY

NMLC-028990-B Lease:

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 13-3/8 inch 9-5/8 inch 7 inch
- C. BOP tests
- 2 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. The 13-3/8 inch surface casing shall be set at 700 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

Note: If salt occurs above the setting depth of 700 feet set surface casing at least 10 feet above the top of the salt.

- 2. The minimum required fill of cement behind the <u>9-5/8</u> inch salt protection casing is <u>circulate cement to</u> the surface.
- 3. The minimum required fill of cement behind the 7 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>9-5/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shall be **5000** psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.

- The results of the test shall be reported to the appropriate BLM office.

- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

- BOPE must be tested prior to drilling into the **Wolfcamp** formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well