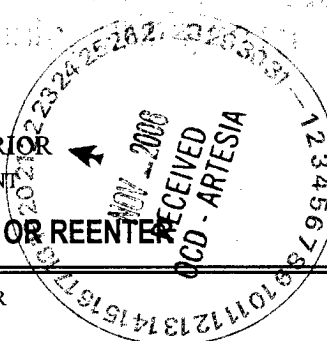


**S**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER



0  
OMB No. 1004-0136  
Expires November 30, 2000

5. Lease Serial No.  
**NM-106905**

6. If Indian, Allottee or Tribe Name  
**Not Applicable**

7. If Unit or CA Agreement, Name and No.  
**Not Applicable**

8. Lease Name and Well No. **36160**  
**Touchdown BJC Federal #1**

9. API Well No.  
**30-005-63876**

10. Field and Pool, or Exploratory **97406**  
**Lea Lake; Pre-Permian Gas Pool**

11. Sec., T., R., M., or Blk. and Survey or Area  
**Section 11, T12S-R26E**

12. County or Parish  
**Chaves**

13. State  
**NM**

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator  
**Yates Petroleum Corporation 25575**

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

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

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **1980' FSL and 660' FEL, Unit I-NESE**  
At proposed prod. Zone **same as above**

14. Distance in miles and direction from nearest town or post office\*  
**Approximately twenty miles (20) 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)  
**600'**

16. No. of Acres in lease  
**640**

17. Spacing Unit dedicated to this well  
**S/2**

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.  
**3000'**

19. Proposed Depth  
**6,295**

20. BLM/BIA Bond No. on file  
**NM-2811**

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
**3739' GL**

22. Approximate date work will start\*  
**ASAP**

23. Estimated duration  
**30 Days**

24. Attachments **ROSWELL CONTROLLED WATER BASIN**

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 office.

25. Signature  
*Debbie L. Caffall*  
Title:  
**Regulatory Agent/Land Department**

Name (Printed/Typed)  
**Debbie Caffall**

Date  
**9/21/2006**

Approved by (Signature)  
**/S/LARRY D. BRAY**

Name (Printed/Typed)  
**/S/LARRY D. BRAY**

Date  
**NOV 21 2006**

Title  
**Assistant Field Manager,  
Lands And Minerals**

Office  
**ROSWELL FIELD OFFICE**

**APPROVED FOR 1 YEAR**

Application approval does not warrant or certify that 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) C-144 attached

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED**

**WITNESS SURFACE  
CASING** If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

**DISTRICT I**  
1085 N. French Dr., Hobbs, NM 88240

**DISTRICT II**  
811 South First, Artesia, NM 88210

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

**DISTRICT IV**  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised March 17, 1999  
Instruction on back  
Submit to appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number	Pool Code 97406	Pool Name Lea Lake; Pre-Permian Gas Pool
Property Code	Property Name TOUCHDOWN "BJC" FEDERAL	Well Number 1
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3739

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	11	12S	26E		1980	SOUTH	660	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 320 S/2	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**

NM-106905			
NM-106905		N.33°17'25.3" W.104°18'16.4" N.833178.9 E.550133.2 (NAD-83)	3732 3747 3734 3747 1980'

**OPERATOR CERTIFICATION**

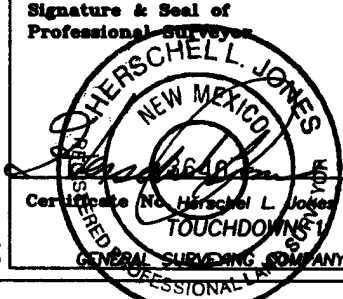
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

*Debbie L. Caffall*  
Signature  
Debbie L. Caffall  
Printed Name  
Regulatory Agent  
Title  
September 21, 2006  
Date

**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.

8/29/2006  
Date Surveyed

Signature & Seal of Professional Surveyor  


0 330' 660' 990' 1650' 1980' 2310' 2310' 1980' 1650' 990' 660' 330' 0'

**YATES PETROLEUM CORPORATION**  
**Touchdown BJC Federal #1**  
1980' FSL and 660' FEL, Unit I - NESE  
Section 11,-T12S-R26E  
Chaves County, New Mexico

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

Queen	395'
Penrose	480'
Grayburg	680'
San Andres	920'
Glorieta	2,100'
Yeso	2,220'
Tubb	3,570'
ABO	4,320'
Wolfcamp	4,965'
Wolfcamp B	5,065'
WC/Cisco Carbonate	5,150'
Strawn	6,020'
Silurian - Devonian	6,145'
TD	6,295'

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

Water: 150'-200'  
Oil or Gas: All potential zones.

3. Pressure Control Equipment: 3000 psi BOP nipped up on 8 5/8" casing, 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 Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>
<b>WITNESS</b>	12 1/4	8 5/8"	24#	J-55	ST&C	0-1000'
	7 7/8"	5 1/2"	15.5#	J-55	LT&C	0-6295'

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

- A. CEMENTING PROGRAM:  
 Surface Casing: 300 sx C Lite (YLD 1.99 WT 12.60). Tail in with 200 sx C (YLD 1.32 WT 14.80).  
 Production Casing: 400 sx LiteCrete (YLD 2.92 WT 9.90). Tail in with 625 sx PecosVilt (YLD 1.41 WT 13.00).

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-1000'	Fresh Water Gel	8.5 – 8.9	32-34	N/C
1000'-2000'	Fresh Water	8.4 – 8.4	28	N/C
2000'-4250'	Brine Water	9.2 - 9.2	28- 29	N/C
4250'-6295'	Salt Gel/Starch/4-6% KCL	9.6 - 9.8	45-55	<6/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: 10' Samples—Surface casing to TD.  
 Logging: Plat form Express: CNL/LDT/NGT from TD to surface casing  
 CNL/GR from TD to surface.  
 DLL-MSFL from TD to surface casing.  
 BHC-Sonic from 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: 510 PSI  
 From: 1000' TO: 6295' Anticipated Max. BHP: 3150 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

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 25 days to drill the well with completion taking another 20 days.

## **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

### **Touchdown BJC Federal #1**

1980' FSL and 660' FEL, Unit I - NESE

Section 11,-T12S-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 20 miles, northeast 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, NM ON HIGHWAY 380 FOR APPROX. 11.2 MILES TO NM-409. TURN RIGHT (SOUTH) AND CONTINUE FOR APPROX. 6.5 MILES TO WICHITA ROAD. TURN LEFT ONTO WICHITA ROAD AND CONTINUE SOUTH FOR APPROX. 2.1 MILES. TURN LEFT (EAST) ONTO EXISTING LEASE ROAD AT LOCKED DOUBLE GATES, GATES MUST REMAIN CLOSED AND LOCKED AT ALL TIMES! CONTINUE EAST FOR APPROX 1 MILE, ROAD TURNS LEFT (NORTH), TURN LEFT AND CONTINUE FOR APPROX. 0.3 OF A MILE TURN LEFT (WEST) THE NEW ROAD ACCESS WILL START HERE AND CONTINUE FOR APPROX. 1128.7 FT = 68.3515 RODS MORE OR LESS TO THE SOUTHEAST CORNER OF PAD

#### **2. PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 1128.7' in length from the point of origin to the southeast corner of the drilling pad. The new road will lie in a 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. 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:**

Dirt contractor will locate nearest pit and obtain any permits and materials 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 600' x 600' area has been staked and flagged.

**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: McMaster Trust – Elliot G and Evelyn McMaster  
PO Box 176  
Datil, NM 87821-0176

The private surface owner has been contacted and an agreement will be made prior to the drilling of the above mentioned.

Minerals: USA - 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:

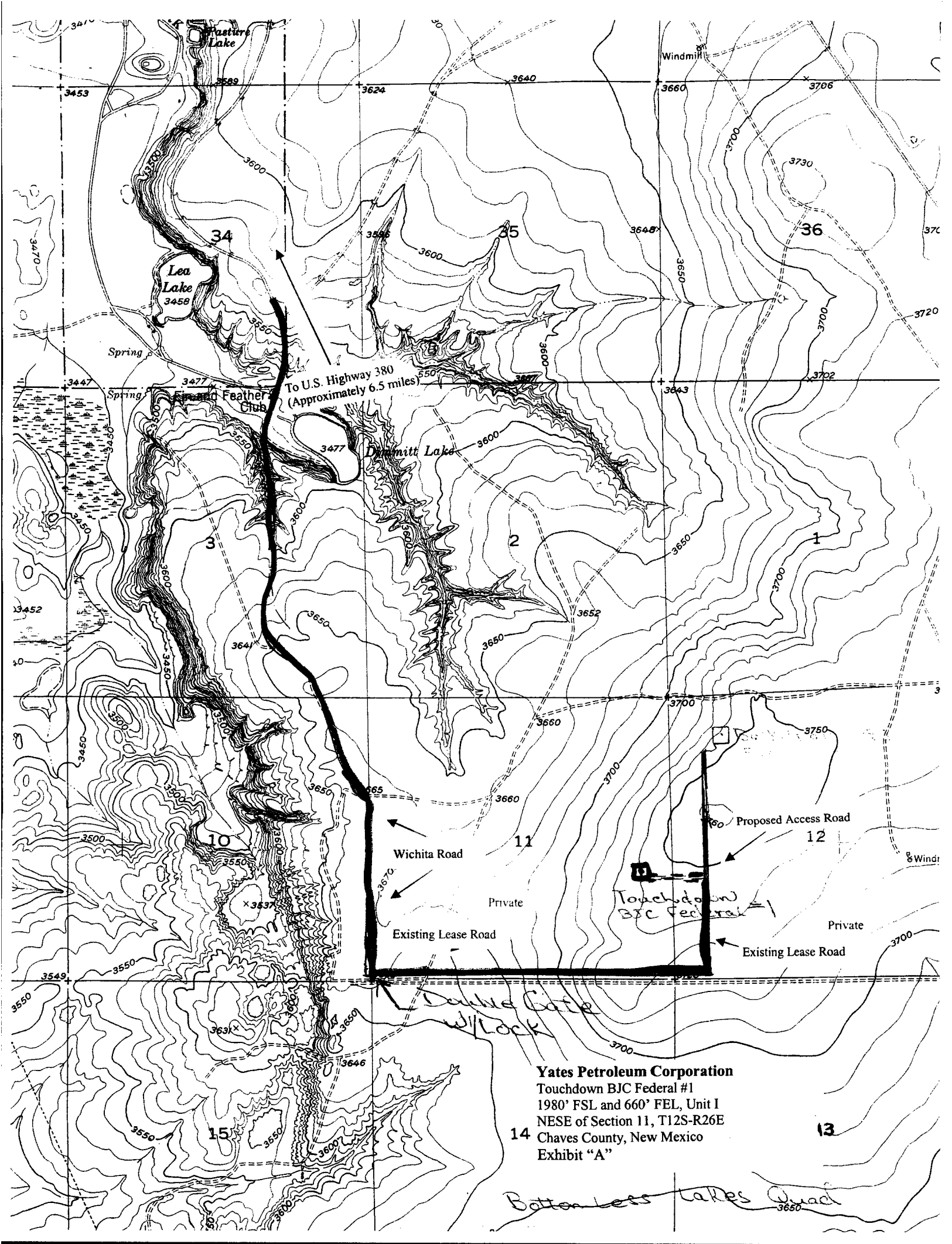
- |   |   |
|---|---|
| A. Through A.P.D. Approval:<br>Debbie L. Caffall, Permit Agent<br>Yates Petroleum Corporation<br>105 South Fourth Street<br>Artesia, New Mexico 88210<br>Phone (505) 748-1471 | B. Through Drilling, Completions & Prod.<br>Pinson McWhorter, Operations Manager<br>Yates Petroleum Corporation<br>105 South Fourth Street<br>Artesia, New Mexico 88210<br>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.

09/21/2006

  
Regulatory Agent

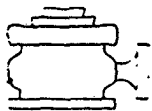


**Yates Petroleum Corporation**  
Touchdown BJC Federal #1  
1980' FSL and 660' FEL, Unit I  
NESE of Section 11, T12S-R26E  
Chaves County, New Mexico  
Exhibit "A"

14

13

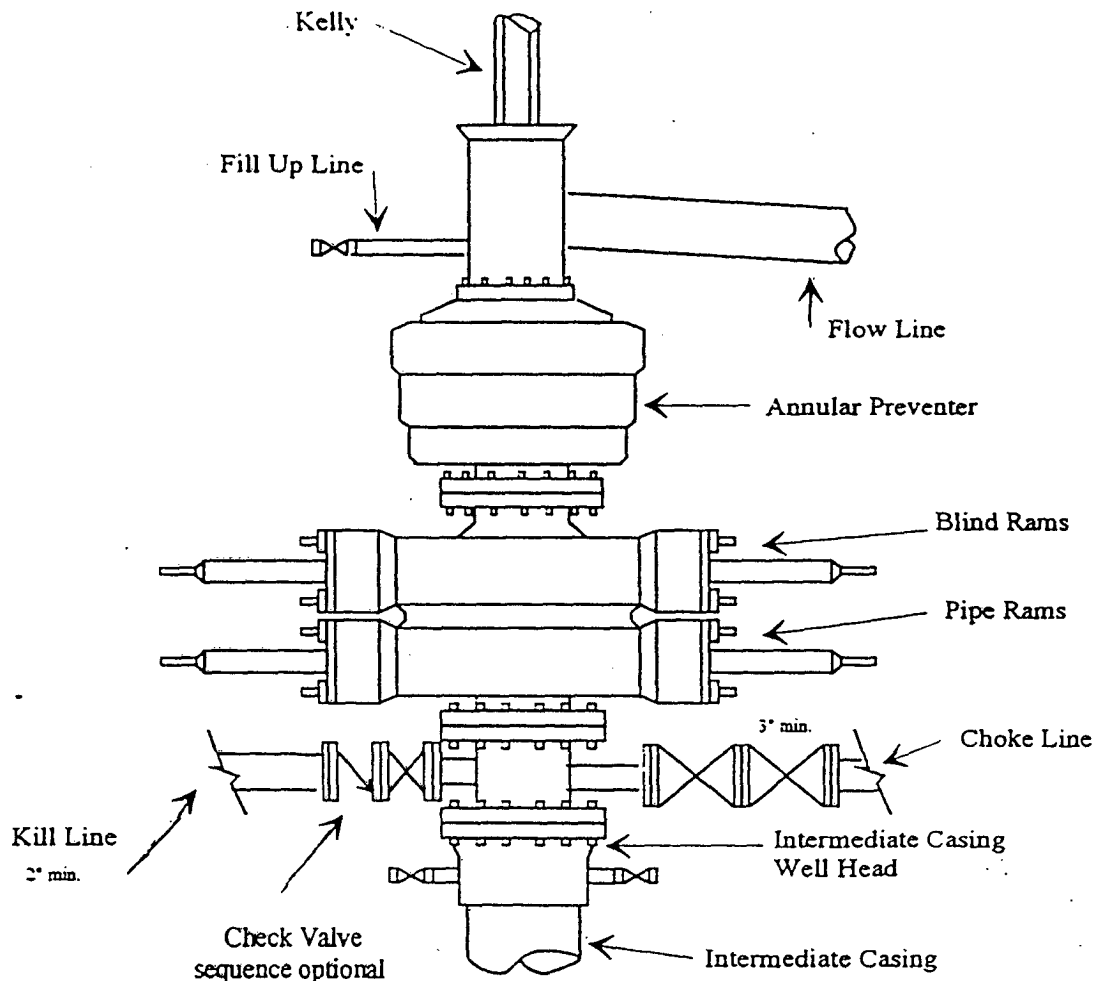
Bottomless Lakes Quad



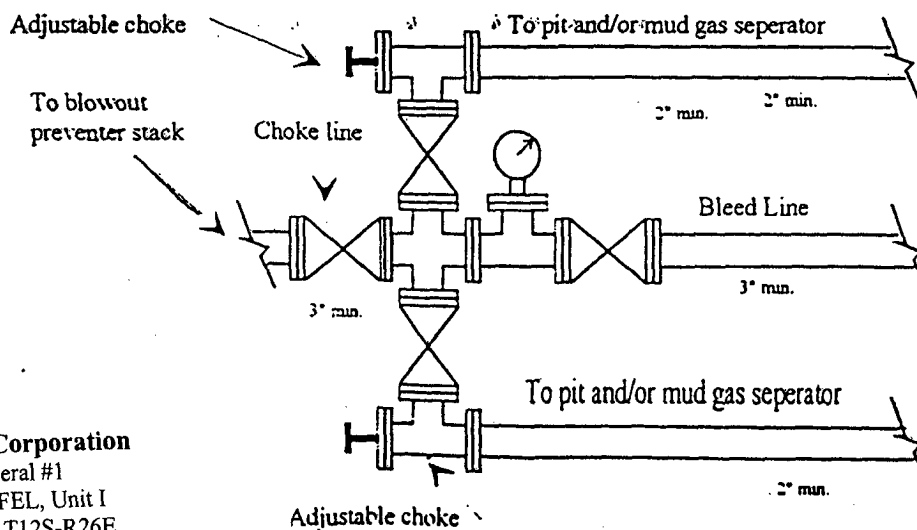
# Yates Petroleum Corporation

## Typical 3,000 psi Pressure System Schematic Annular with Double Ram Preventer Stack

BOP-3



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



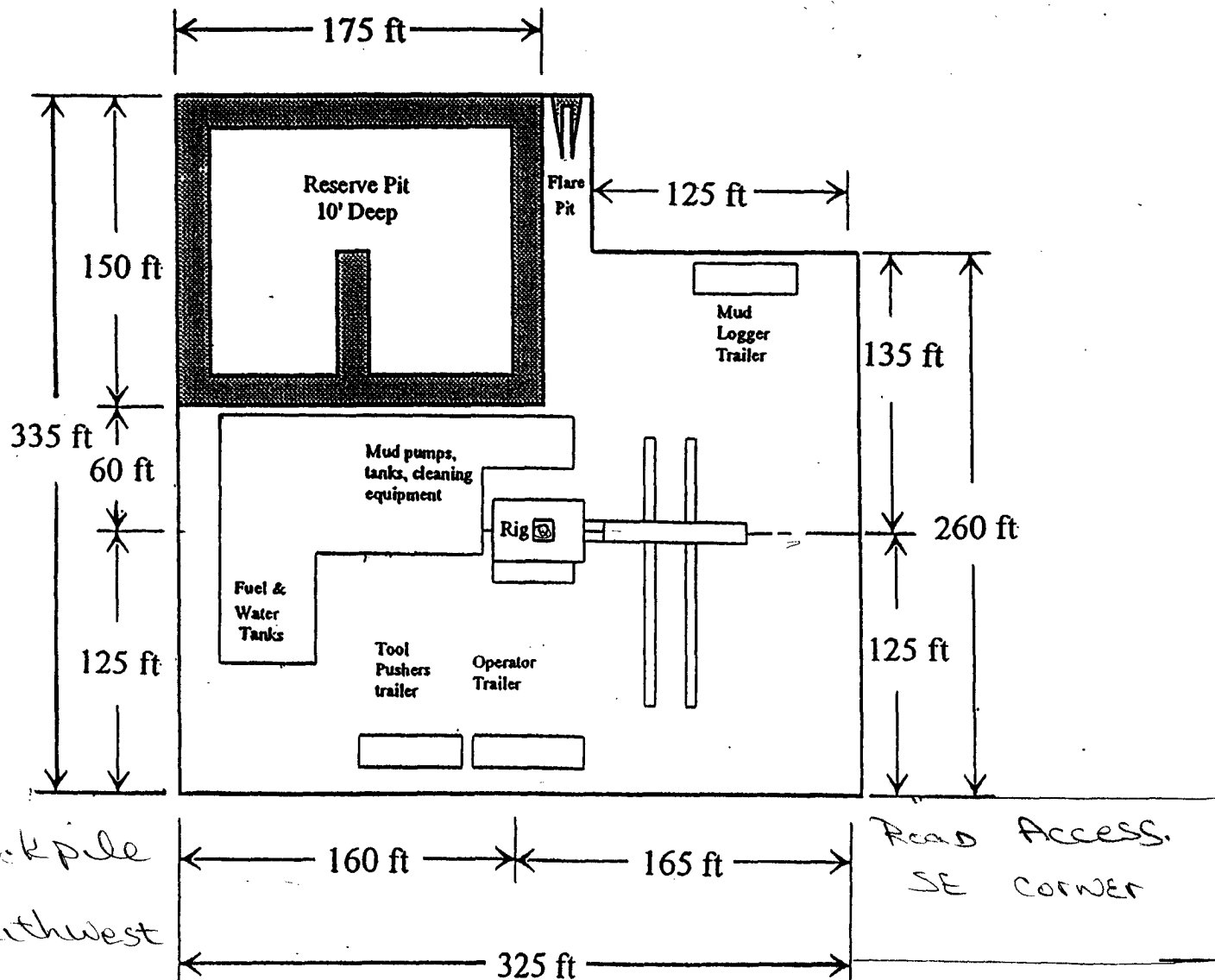
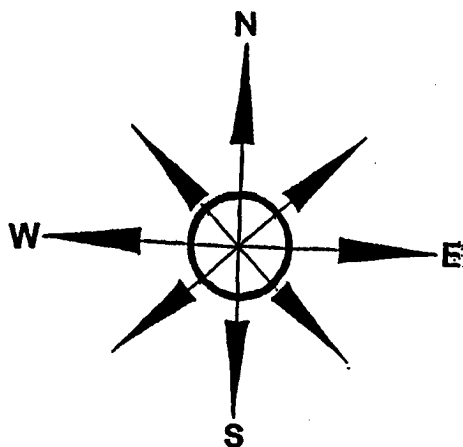
Yates Petroleum Corporation  
Touchdown BJC Federal #1  
1980' FSL and 660' FEL, Unit I  
NESE of Section 11, T12S-R26E  
Chaves County, New Mexico  
Exhibit "B"

PB - L1

# Yates Petroleum Corporation

Location Layout for Permian Basin  
Up to 12,000'

*Pits Northeast*



Yates Petroleum Corporation  
Touchdown BJC Federal #1  
1980' FSL and 660' FEL, Unit I  
NESE of Section 11, T12S-R26E  
Chaves County, New Mexico  
Exhibit "C"

Distance from Well  
Head to Reserve Pit  
will vary between rigs

The above dimension  
should be a maximum

Touchdown BJC Federal #1  
1980' FSL and 660' FEL, Unit I - NESE  
Section 11, T12S-R26E  
Chaves County, New Mexico

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

105 South Fourth Street, Artesia, NM 88210

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ CheckBox1

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Yates Petroleum Corporation Telephone: 505-748-4376 e-mail address: debbiec@ypcnm.com  
Address: 104 South 4<sup>th</sup> Street, Artesia, New Mexico 88210  
Facility or well name: Touchdown BJC Federal #1 API 30-005-63876 U/L or Qtr/Qtr I, NESE Sec 11 T 12S R26E  
County: Chaves Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ NAD: 1927 ☒ 1983 ☐ Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u>24,000</u> bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points)
	50 feet or more, but less than 100 feet (10 points)
	100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points)
	No (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points)
	200 feet or more, but less than 1000 feet (10 points)
	1000 feet or more (0 points)
Ranking Score (Total Points) 0 points	

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OCD-approved plan ☐.

Date: 09/21/2006

Printed Name/Title Debbie L. Caffall/Regulatory Agent

Signature Debbie L. Caffall

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Date: \_\_\_\_\_

Printed Name/Title \_\_\_\_\_ Signature \_\_\_\_\_



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201

## EXHIBIT B

### WELL DRILLING REQUIREMENTS

1 of 5 pages

OPERATORS NAME: Yates Petroleum Corporation LEASE NO.: NM-106905  
WELL NAME & NO: Touchdown "BJC" Federal #1  
QUARTER/QUARTER & FOOTAGE: SE $\frac{1}{4}$ NE $\frac{1}{4}$  - 1980' FSL & 660' FEL  
LOCATION: Section 11, T. 12 S., R. 26 E., NMPM  
COUNTY: Chaves County, New Mexico

#### I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

#### II. WELL PAD CONSTRUCTION REQUIREMENTS:

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number (505) 627-0247.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).
- C. The holder shall stockpile the topsoil from the surface of the well pad. The topsoil on the Touchdown "BJC" Federal #1 well pad is approximate 6 inches in depth. Approximately 800 cubic yards of topsoil shall be stockpiled on the Southwest corner of the well pad, opposite the reserve pit.

#### D. Reserve Pit Requirements:

1. The reserve pit shall be constructed 150' X 175' on the East/Northeast side of the well pad.
2. The reserve pit shall be constructed to a minimum depth of four (4) feet below ground level. The reserve pit shall be constructed, so that the cuttings in the reserve pit can be buried a minimum depth of three (3) feet below ground level. See Exhibit F – Surface Reclamation/Restoration Requirements.
3. A synthetic or fabricated liner 12 mil in thickness shall be used to line the reserve pit. The liner shall meet ASTM standards that are designed to be resistant to the reserve pit contents.

4. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.
5. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the well location.
6. The reserve pit shall not be located in any natural drainage.
7. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
8. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site. The reserve pit shall be backfilled when dry.
9. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**

### E. Federal Mineral Materials Pit Requirements:

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.
3. Mineral Materials extracted during construction of the reserve pit may be used for development of the pad and access road as needed, for the Touchdown "BJC" Federal #1 gas well only. Removal of any additional material on location must be purchased from BLM prior to removal of any material.
  - a. An optional mineral material pit may be constructed within the archaeologically cleared area. The mineral material removed in the process can be used for pad and access road construction. However, a mineral material sales contract must be purchased from the BLM prior to removal of any material.

### F. Well Pad Surfacing Requirement:

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. See **Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

### G. Cave Requirements:

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease. Contact **Bill Murry** at (505) 627-0220.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

**III. A. WELL SUBSURFACE REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second Street, Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties in sufficient time for a representative to witness: A. Well spud B. Cementing casing: 8-5/8 inch 5-1/2 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.

**B. CASING:**

1. The 8-5/8 inch surface casing shall be set at approximately 1050 feet 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.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

**C. 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 8-5/8 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) shall be 2000 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.

**D. 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:

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

**IV. ON LEASE - WELL REQUIREMENTS:**

A. The holder shall post signs identifying the location permitted herein with the requirements contained in Onshore Oil and Gas Order #1 and 43 CFR 3162.6.

B. The following data is required on the well sign that shall be posted in a conspicuous place on the well pad. The sign shall be kept up with current identification and shall be legible for as long as the well is in existence:

Operator Name: Yates Petroleum Corporation  
Well Name & No.: Touchdown "BJC" Federal #1  
Lease No.: NM-106905  
Footage: 1980' FSL & 660' FEL  
Location: Section 11, T. 12 S., R. 26 E.

C. UPON ABANDONMENT OF THE WELL, THE SAME INFORMATION SHALL BE INSCRIBED ON THE DRY HOLE MARKER WITH A BEADED WELD.

D. The approval of the APD does not in any way imply or grant approval of any on-lease, off-lease, or off-unit action(s). It is the responsibility of the holder to obtain other approval(s) such as rights-of-way from the Roswell Field Office or other agencies, including private surface landowner(s).

E. All vehicles, including caterpillar track-type tractors, motor graders, off-highway trucks and any other type of motorized equipment that is used in the construction of the access road and well pad shall be confined to the area(s) herein approved. The drilling rig that is used to drill the well shall also be confined to the approved area(s).

**F. Containment Structure Requirement:**

1. A containment structure or earthen dike shall be constructed and maintained around all storage facilities/batteries. The containment structure or earthen dike shall surround the storage facilities/batteries.
2. The containment structure or earthen dike shall be constructed two (2) feet high around the facilities/batteries (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).
3. The perimeter of the containment structure or earthen dike can be constructed substantial larger for greater holding capacity of the contents of the largest tank.
4. The containment structure or earthen dike shall be constructed so that in case of a spill the structure can contain the entire contents of the largest tank, plus 24 hour production, within the containment structure or earthen dike, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

**G. Painting Requirement:**

All above-ground structures (e.g.: meter houses, tanks, above ground pipelines, and related appurtenance, etc.) not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The color selected for painting all the well facilities is Olive Drab, Supplemental Environmental Colors 18-0622 TPX.

**H. Fence Requirement:**

The holder shall minimize disturbance to existing fences and other improvements on public land. The holder is required to promptly repair impacted improvements to at least their former state. On private surface the holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates shall be allowed unless approved by the Authorized Officer.

**I. Open-vent Exhaust Stack Requirements:**

1. All open-vent exhaust stacks associated with heater-treater, separators and dehydrator units shall be modified to prevent birds and bats from entering them and to the extent practical to discourage perching and nesting.
2. New production equipment installed on federal leases after November 1<sup>st</sup>, 1993, shall have the open-vent exhaust stacks constructed to prevent the entry of birds and bats and to the extent practical, to discourage perching, and nesting.

**V. Invasive and Noxious Weeds Requirement:**

A. The holder shall be held responsible if noxious weeds become established within the area. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipelines, and adjacent land affected by the establishment of weeds due to this action. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.

B. The holder shall insure that the equipment and or vehicles that will be used to construct, maintain and administer the access roads, well pad and resulting well are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to construction, maintenance and administration of the access roads, well pad and resulting well.

**VI. SPECIAL REQUIREMENT(S): NONE**