

N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

Form-3160-3  
(August 1999)



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JUL -9 2007  
OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.	<b>NM-90864</b>
6. If Indian, Allottee or Tribe Name	<b>Not Applicable</b>
7. If Unit or CA Agreement, Name and No.	<b>Not Applicable</b>
8. Lease Name and Well No.	<b>Kirby BCK Federal Com. #2</b>
9. API Well No.	<b>30-005-63955</b>
10. Field and Pool, or Exploratory	<b>Foor Ranch: Pre-Permian Gas Pool</b>
11. Sec., T., R., M., or Blk. and Survey or Area	<b>Section 21, T10S-R26E</b>

1a. Type of Work.	<input checked="" type="checkbox"/> DRILL	<input type="checkbox"/> REENTER			
b. Type of Well	<input type="checkbox"/> Oil Well	<input checked="" type="checkbox"/> Gas Well	<input type="checkbox"/> Other	<input type="checkbox"/> Single Zone	<input checked="" type="checkbox"/> Multiple Zone

2. Name of Operator	<b>Yates Petroleum Corporation</b>		
3A. Address	<b>105 South Fourth Street Artesia, New Mexico 88210</b>	3b. Phone No. (include area code)	<b>(505) 748-1471</b>

4. Location of Well (Report location clearly and in accordance with any State requirements *)	<b>1980' FSL and 1980' FWL, Unit K (NESW)</b>
At surface	<b>same as above</b>
At proposed prod. Zone	<b>ROSWELL CONTROLLED WATER BASIN</b>

14. Distance in miles and direction from nearest town or post office*	<b>Approximately twenty (15) miles east/north of Roswell, NM</b>
---	--

12. County or Parish	<b>Chaves County</b>	13. State	<b>New Mexico</b>
----------------------	----------------------	-----------	-------------------

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	<b>660'</b>	16. No. of Acres in lease	<b>120</b>	17. Spacing Unit dedicated to this well	<b>320 Acres - W/2</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	<b>1650'</b>	19. Proposed Depth	<b>6160'</b>	20. BLM/BIA Bond No. on file	<b>NMB000434</b>
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	<b>3698 GL</b>	22. Approximate date work will start*	<b>ASAP</b>	23. Estimated duration	<b>30 Days</b>

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).   |
| 2. A Drilling Plan   | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature	Name (Printed/Typed)	Date
	<b>Debbie L. Caffall</b>	<b>5/17/2007</b>
Title: <b>Regulatory Agent / Land Department</b>		
Approved by (Signature)	Name (Printed/Typed)	Date
<b>/S/ JOHN S. SIMITZ</b>	<b>/S/ JOHN S. SIMITZ</b>	<b>JUL 05 2007</b>
Title	Office	
<b>Acting Assistant Field Manager, Lands And Minerals</b>	<b>ROSWELL FIELD OFFICE</b>	<b>APPROVED FOR 2 YEARS</b>

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

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

☐ AMENDED REPORT

NM-90864		<div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the Division.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="flex: 1;"> </div> <div style="text-align: right;"> <p>3/28/2007</p> <p>Date</p> </div> </div> <p>Debbie L. Caffall</p> <p>Printed Name</p> </div>
	<p>             N.33°42'22.22"              W.104°30'46.67"              N.883685.3              E.508752.9              (NAD-27)           </p>	<div style="border: 1px solid black; padding: 5px;"> <h3 style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</h3> <p style="font-size: small; margin: 5px 0;">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.</p> <div style="text-align: right; margin-top: 20px;"> <p>3/27/2007</p> <p>Date Surveyed</p> </div> <p>Signature &amp; Seal of Professional Surveyor</p> <div style="text-align: center; margin-top: 10px;"> </div> <p style="font-size: small; margin-top: 5px;">Certificate No. Herschel L. Jones 3640</p> </div>

**YATES PETROLEUM CORPORATION**  
**Kirby BCK Federal Com. #2**  
 1980' FSL and 1980' FWL, Unit K (NESW)  
 Section 21, T10S-R26E  
 Chaves County, New Mexico

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

Queen	405'	Wolfcamp B	5085'
Penrose	480'	Spear	5330'
Grayburg	670'	Cisco	5565'
San Andres	925'	Siluro-Devonian	5690'
Glorieta	2010'	Precambrian	6060'
Yeso	2135'	TD	6160'
Tubb	3560'		
Abo	4315'		
Wolfcamp	4990'		

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

Water: 50'-150'  
 Oil or Gas: Precambrian Formation.

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" casing and rated for 2000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

**Auxiliary Equipment:**

- A. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

4. THE PROPOSED CASING AND CEMENTING PROGRAM:

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>
14 3/4"	11 3/4"	42#	H-40	ST&C	0-600'
11	*8 5/8"	24#	J-55	ST&C	0-1600'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	0-6160'

\* Intermediate casing will only be run if hole conditions dictate. If intermediate casing is not run, hole size will be reduced to 7 7/8" and drilled to TD where 5 1/2" casing will be set and cemented to surface.

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

B. CEMENTING PROGRAM:

Surface Casing: 400 sx "C" w/2% CaCL2 (YLD 1.32 WT 14.80).

Intermediate Casing: 250 sx "C" w/2% CaCL2 (YLD 1.32 WT 14.8)

Production Casing: 650 sx "C" Lite (YLD 2.00 WT 12.50)  
tail in with 600 sx Pecos Valley Lite (YLD 1.41 WT 13.0).

**WITNESS**

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-600'	Fresh Water Gel	8.6 - 9.2	32-36	N/C
600'-4,250'	Brine Water	10.0 -10.20	28-28	N/C
4,250'-6,160'	Salt Water Gel/Starch	10.0 -10.20	45-50	<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 from Surface casing to TD.  
Logging: Platform Express; CNL/LDT/NGT TD - Surf csg;  
CNL/GR TD - Surf ; DLL/MSFL TD - Surf csg;  
BHC Sonic TD-Surf csg;  
Coring: None anticipated  
DST's: None anticipated  
Mudlogging: Yes

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

Anticipated BHP:

From: 0	TO: 600'	Anticipated Max. BHP: 285 PSI
From: 600'	TO: 1600'	Anticipated Max. BHP: 850 PSI
From: 1600'	TO: 6160'	Anticipated Max. BHP: 3265 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 10 days to drill the well with completion taking another 20 days.

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

### **Kirby BCK Federal Com. #2**

1980' FSL and 1980' FWL, Unit K (NESW)

Section 21 T10S-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 well site is located approximately 15 miles east/north of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

#### **DIRECTIONS:**

Drive east of Roswell on US 70 – US 380 (Tatum Hwy) approximately 8.4 miles to Alamo Road (C2-061). Turn left (north) on Alamo Road and drive approximately 1.8 miles to Hachita Road (C2-062) turn right (east) on Hachita Road and drive approximately 1.0 miles staying to the right to a fork in the road, turn right (east) on existing lease road and continue for approximately 1.2 miles to where the new road will start at the southwest corner of the Kirby BCK Federal Com. #1 pad in a south direction and will travel approximately 618.4 feet = 37.4788 rods, more or less on Federal Lands to a fence where a steel pipe gate will be installed to continue traveling south onto private lands for approximately 833.7 feet = 50.5273 rods, more or less to the southwest corner of the proposed drilling pad.

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

- A. The proposed new lease road right of way 30 feet wide and 618.4 feet = 37.4788 rods, 0.1171 miles, more or less in length, located in section 21, T10S-R26E unit F (SENE) on U.S.A. lands, a steel pipe gate will be installed to continue traveling south for approximately 833.7 feet = 50.5273 rods, .1579 of a mile located in section 21, T10S-R26E unit K (NESW) on private surface. The new lease road will be a total of 1,452.1 feet = 88.0061 rods or .2750 of a mile, more or less in length from the point of origin traveling in a southerly direction to the southwest corner of the proposed drilling pad.(Exhibit A-1 and Exhibit A-2)
- B. The new road will be 15 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 no drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

#### **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 landfill. 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 (approximately 3 acres).
- B. Yates Petroleum Corporation is in full compliance with the OCD General Plan for Drilling Pits, approved on April 15, 2004. The reserve pits will be plastic lined (12 mil. thick with an estimated volume of 24,000 bbls).
- 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 well site 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: Alfonso Cabellero – Gents Cattle Company, Inc.  
7 Berrendo Meadows Cr.  
Roswell, New Mexico 88210  
(505) 623-0715

MINERALS: Bureau of Land Management  
Administered by Roswell New Mexico Field Office

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.

**CERTIFICATION**  
**YATES PETROLEUM CORPORATION**

**Kirby BCK Federal Com. #2**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 17<sup>th</sup> day of MAY, 2007.

Signature Debbie L. Caffall

Name Debbie L. Caffall

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, New Mexico, 88210

Telephone (505) 748-4376 Fax: (505) 748-4572

E-mail (optional) debbiec@ypcnm.com

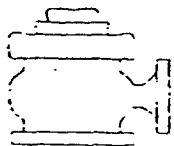
Field Representative (if not above signatory) Jim Krogman

Address (if different from above) Same

Telephone (if different from above) (505) 748-4215

E-mail (optional) \_\_\_\_\_

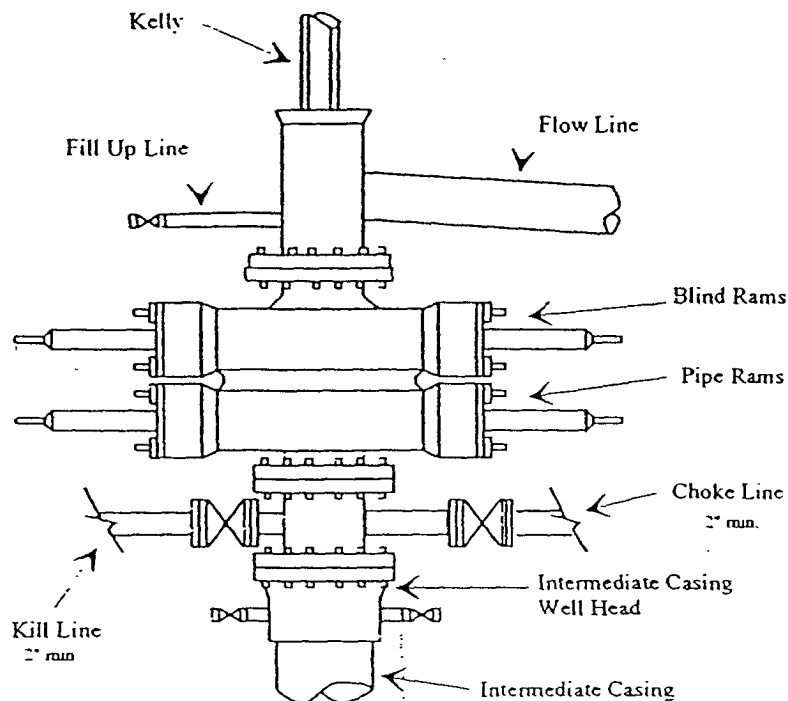




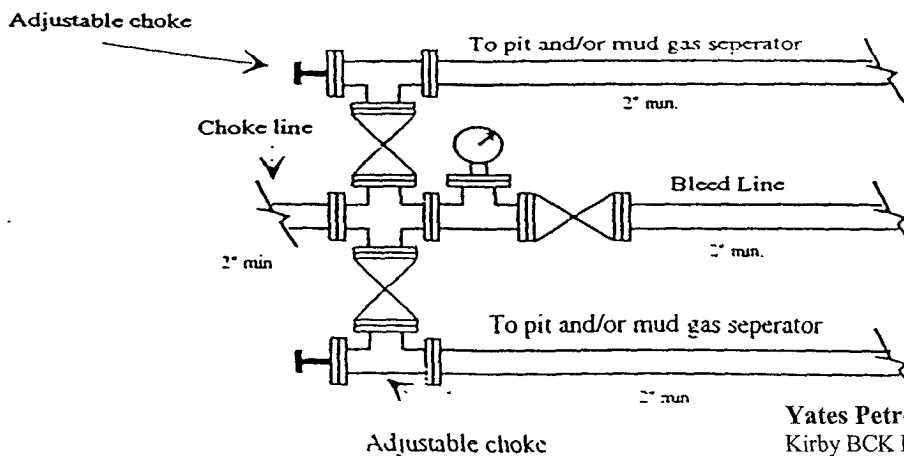
# Yates Petroleum Corporation

BOP-2

## Typical 2,000 psi Pressure System Schematic Double Ram Preventer Stack



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



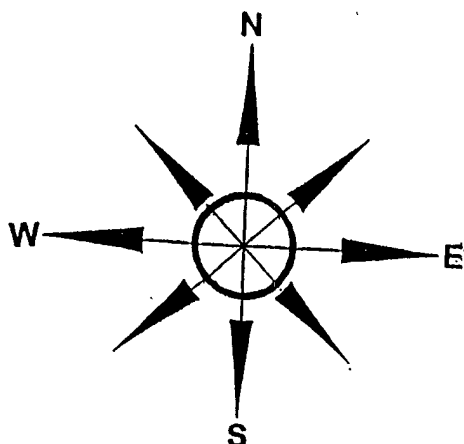
**Yates Petroleum Corporation**  
Kirby BCK Federal Com. #2  
1980' FSL and 1980' FWL, Unit K  
NESW of Section 21, T10S-R26E  
Chaves County, New Mexico  
Exhibit "B"

PB - L1

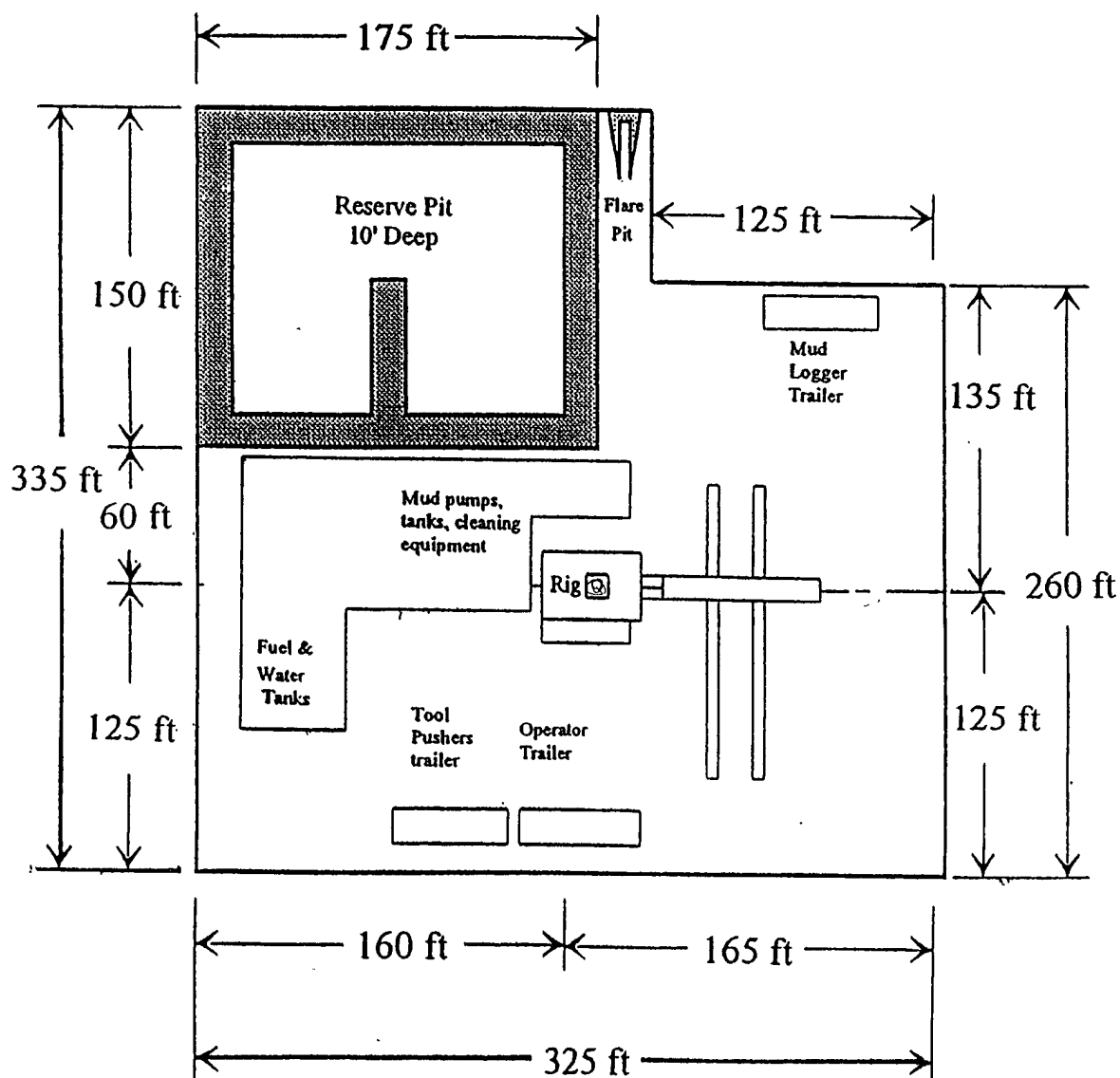
# Yates Petroleum Corporation

Location Layout for Permian Basin  
Up to 12,000'

Yates Petroleum Corporation  
Kirby BCK Federal Com. #2  
1980' FSL and 1980' FWL, Unit K  
NESW of Section 21, T10S-R26E  
Chaves County, New Mexico  
Exhibit "C"



## Pits - North



Access – Southwest

Distance from Well  
Head to Reserve Pit  
will vary between rigs

Topsoil – Southeast

The above dimension

**III. WELL SUBSURFACE REQUIREMENTS:**

**A. GENERAL DRILLING 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 in sufficient time for a representative to witness:

A. Spudding

B. BOP Tests

C. Cementing casing: 11 3/4 inch; 8 5/8 inch; 5 1/2 inch. The Intermediate string may be skipped, see explanation below.

2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this wellbore.

3. 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.

4. 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.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A communitization Agreement shall be submitted to this office for approval prior to any sales from this well.

**B. CASING:**

1. The 11 3/4 inch shall be set at 600 Feet with 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 8 5/8 inch Intermediate casing is to circulate to surface. NOTE: The 8 5/8 inch casing may be skipped by drilling out of the 11 3/4 inch surface casing with a 7 7/8 inch bit to drill to TD and run 5 1/2" long string. Depending on discrepancy of the operator.

3. The minimum required fill of cement behind the 5 1/2 inch Production casing is to circulate to surface if this is the second string. If this is the third string the minimum TOC shall be at least 200 feet above the Top of the Wolfcamp. However, if and when the well is abandoned, it will be required to cover the Glorietta with cement.

**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 11 3/4 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 2 M psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

-The test 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 safe workman-like manner. Hard line connections shall be required.

-Both low pressure and high pressure testing of BOPE is required.