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ATS-08-49

Form 3160-3
(April 2004)

DEC 17 2007
OCD-ARTESIA

OCD-ARTESIA

RESUBMITTAL

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

S

1a. Type of Work: ☒ DRILL ☐ REENTER
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

2. Name of Operator
Yates Petroleum Corporation

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 **860' FSL and 760' FWL**
At proposed prod. zone **same as above**

14. Distance in miles and direction from the nearest town or post office*
46 miles Southwest of Artesia, New Mexico

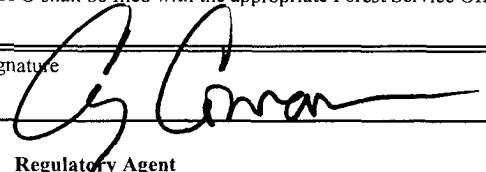
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 760'	16. No. of acres in lease 320.00	17. Spacing Unit dedicated to this well 320 S/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1/2 mile	19. Proposed Depth 8500'	20. BLM/ BIA Bond No. on file NM B000434 NM-284
21. Elevations (Show whether DF, RT, GR, etc.) 4329'	22. Approximate date work will start* ASAP	23. Estimated duration 30 Days

5. Lease Serial No. **NM-21012**
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. **Federal HQ #2**
9. API Well No. **30-015-35989**
10. Field and Pool, or Exploratory **Wildcat Mississippian**
11. Sec., T., R., M., or Blk. And Survey or Area **Section 5, T21S-R22E**
12. County or Parish **Eddy**
13. State **NM**

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 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 a authorized officer. |

25. Signature 	Name (Printed/ Typed) Cy Cowan	Date 10/8/2007
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Title **Regulatory Agent**

Approved By (Signature) /s/ Don Peterson	Name (Printed/ Typed)	Date DEC 12 2007
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Title FOR FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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 cc operations thereon.

Conditions of approval, if any, are attached. **APPROVAL FOR TWO YEARS**

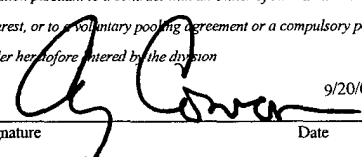
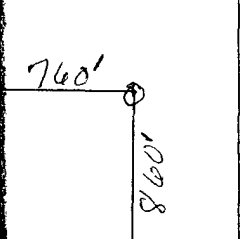
Title 18 U.S.C Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Carlsbad Controlled Water Basin

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

<div data-bbox="86 989 326 1470" data-label="Text"><p>16</p></div>				<div data-bbox="1044 989 1508 1470" data-label="Text"><p>17 OPERATOR CERTIFICATION</p><p><i>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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this 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</i></p><div data-bbox="1088 1168 1450 1325"></div><p>Signature _____ Date <u>9/20/07</u></p><p><u>Cy Cowan</u> Regulatory Agent Printed Name</p></div>
<div data-bbox="86 1470 326 1962" data-label="Text"><p>NM-21012</p><div data-bbox="86 1723 326 1962"></div></div>				<div data-bbox="1044 1470 1508 1962" data-label="Text"><p>18 SURVEYOR CERTIFICATION</p><p><i>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.</i></p><p>Date of Survey _____</p><p>Signature and Seal of Professional Surveyor: _____</p><p>REFER TO ORIGINAL PLAT</p><p>Certificate Number _____</p></div>

MARTIN YATES, III
1912 - 1985
FRANK W. YATES
1936 - 1986



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (505) 748-1471

S. P. YATES
CHAIRMAN OF THE BOARD
JOHN A. YATES
PRESIDENT
PEYTON YATES
EXECUTIVE VICE PRESIDENT
RANDY G. PATTERSON
SECRETARY
DENNIS G. KINSEY
TREASURER

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM-21012

Bond Coverage: Individually Bonded

Legal Description of Land:

BLM Bond File No.: NM 2011 *NM 15000 #34*

Federal HQ #2

860' FSL and 760' FWL S/2

Section 5, T21S-R22E

Eddy County, New Mexico

Formation (s) – (if applicable):

N/A

YATES PETROLEUM CORPORATION

Date: October 06, 2005

Cy Cowan
Cy Cowan, Regulatory Agent

District I
1625 N. French Dr., Hobbs, NM 88240

District II
811 South First, Artesia, NM 88210

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

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

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		Pool Name	
Property Code		Property Name		Well Number	
FEDERAL HQ				2	
OGRID No.		Operator Name		Elevation	
025575		YATES PETROLEUM CORPORATION		4329.	

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	5	21-S	22-E		860	SOUTH	760	WEST	EDDY

11 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		Joint or In/In		Consolidation Code		Order No.			
320									

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

<div>16</div> <div>NM- 21012</div> <div>760'</div> <div>860'</div>				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <div>Cy Cowan</div> <div>Signature Cy Cowan</div> <div>Printed Name Regulatory Agent</div> <div>Title January 18, 2000</div> <div>Date</div>	
				18 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. <div>DECEMBER 17 2000</div> <div>Date of Survey</div> <div>NEW MEXICO</div> <div>5412</div> <div>REGISTERED LAND SURVEYOR ENGINEER</div> <div>NM PRPS NO. 5412</div>	

YATES PETROLEUM CORPORATION

Federal HQ #2
860' FSL and 760' FWL
Section 5-T21S-R22E
Eddy County, New Mexico

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

Glorieta	1460'-Oil Pay
Tubb	2890'-Oil Pay
Abo	3530'-Oil Pay
Wolfcamp	4370'-Oil Pay / GAS
Cisco	6320'-Oil Pay / GAS
Strawn	7620'-Oil Pay / GAS
Atoka	7820'-Oil Pay "
Morrow	8170'-Oil Pay "
Chester	8380'-Oil Pay "
TD	8500'-Oil Pay-

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

Water: 250'-350'
Oil or Gas: All potential zones.

3. Pressure Control Equipment: BOPE will be installed on the 8 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:

- 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)

See COA →

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	H-40	ST&C	0-350'	350'
12 1/4"	8 5/8"	24#	J-55	LT&C	0-1850'	1850'
7 7/8"	5 1/2"	17#	J-55	LT&C	0-100'	100'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	100'-6800'	6700'
7 7/8"	5 1/2"	17#	S-95	Lt&C	6800'-8500'	1700'

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

B. CEMENTING PROGRAM:

Surface casing: 400 sx "C" + 2% CaCL₂ (YLD 1.32 WT 15.6). Surface

Intermediate Casing: 750 sx Lite (YLD 2.0 WT 12.2). Tail in w/200 sx "C" + 2%
CaCL₂ (Yld 1.32 Wt. 15.6). Surface

Production Casing: 775 sx Super "C" modified (Yld 1.63 wt. 13.0), TOC=4200' ← *see COA*

5. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	Freshwater Air Mist	8.4	28	N/C
<i>see COA</i> → 350'-1850'	Freshwater Air Mist	8.4	28	N/C
1850'-7600'	Cut Brine	8.6-9.2	28	N/C
7600'-TD	Salt Gel/Starch	9.2-9.8	32-38	<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: 10' samples out from under surface casing.

Logging: CNL/LDT, DLL w/RXD – TD to casing

Coring: None

DST's: As warranted.

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

Anticipated BHP:

From: 0	TO: 350'	Anticipated Max. BHP: 175	PSI
From: 350'	TO: 1500'	Anticipated Max. BHP: 750	PSI
From: 2050'	TO: 8500'	Anticipated Max. BHP: 3900	PSI

No abnormal pressures or temperatures are anticipated.

Lost Circulation Zones Anticipated: None

H₂S Zones Anticipated: None Anticipated

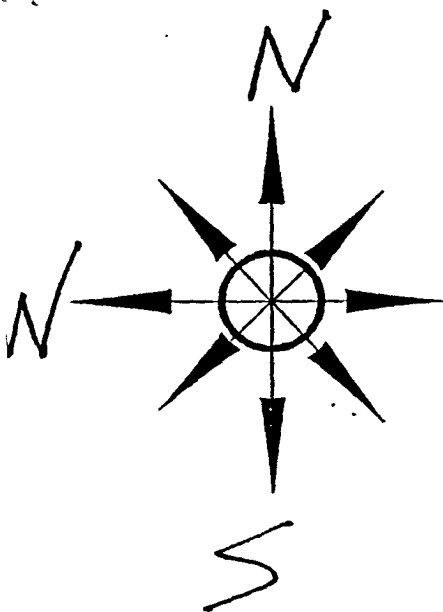
8. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 15 days.

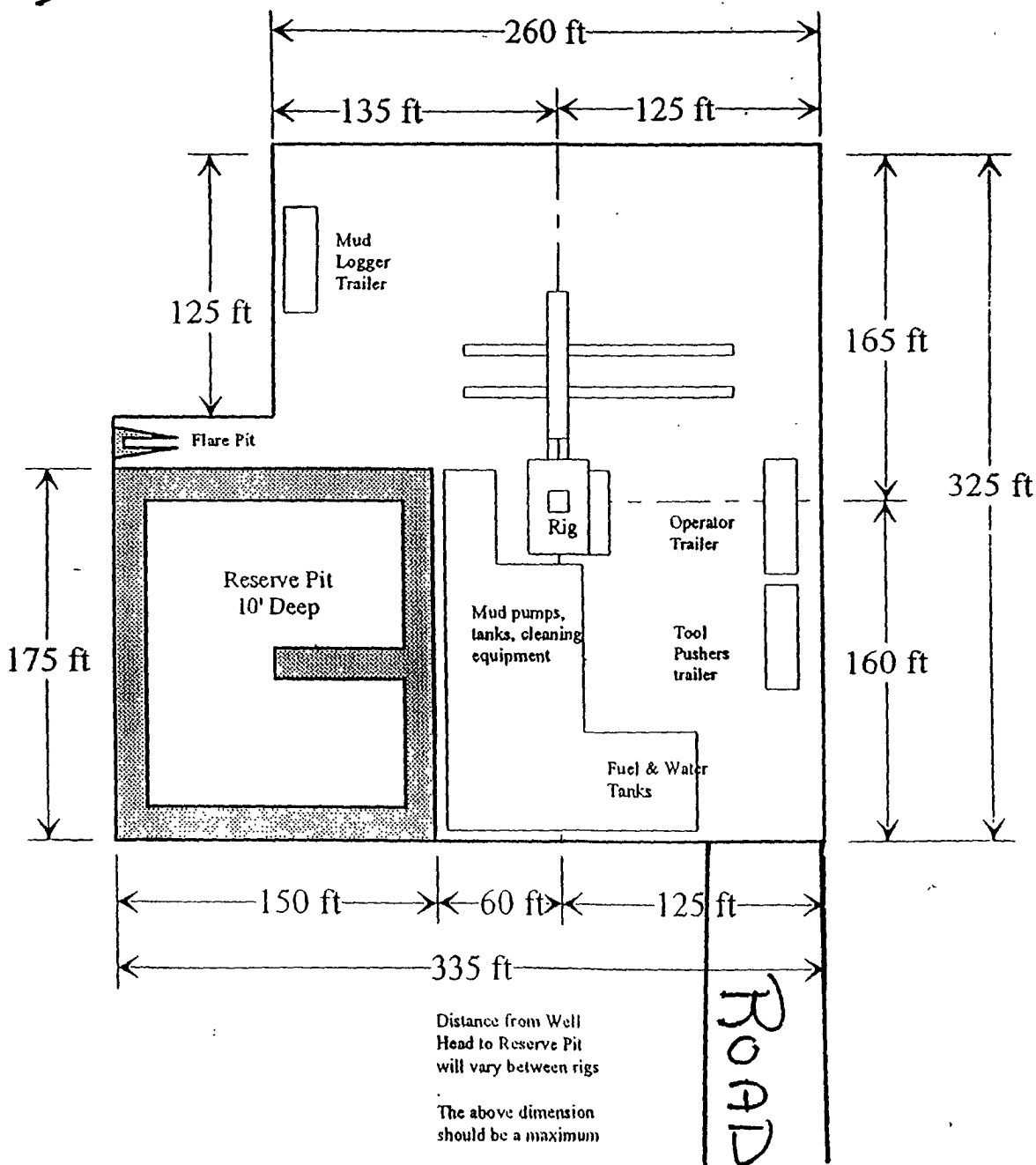
Federal HQ #2
 860' FSL and 760' FWL
 Section 5-T21S-R22E
 Eddy County, New Mexico

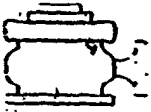
Exhibit "B"

Yates Petroleum Corporation
 Location Layout for Permian Basin
 Up to 12,000'



Pits to the West.





Yates Petroleum Corporation

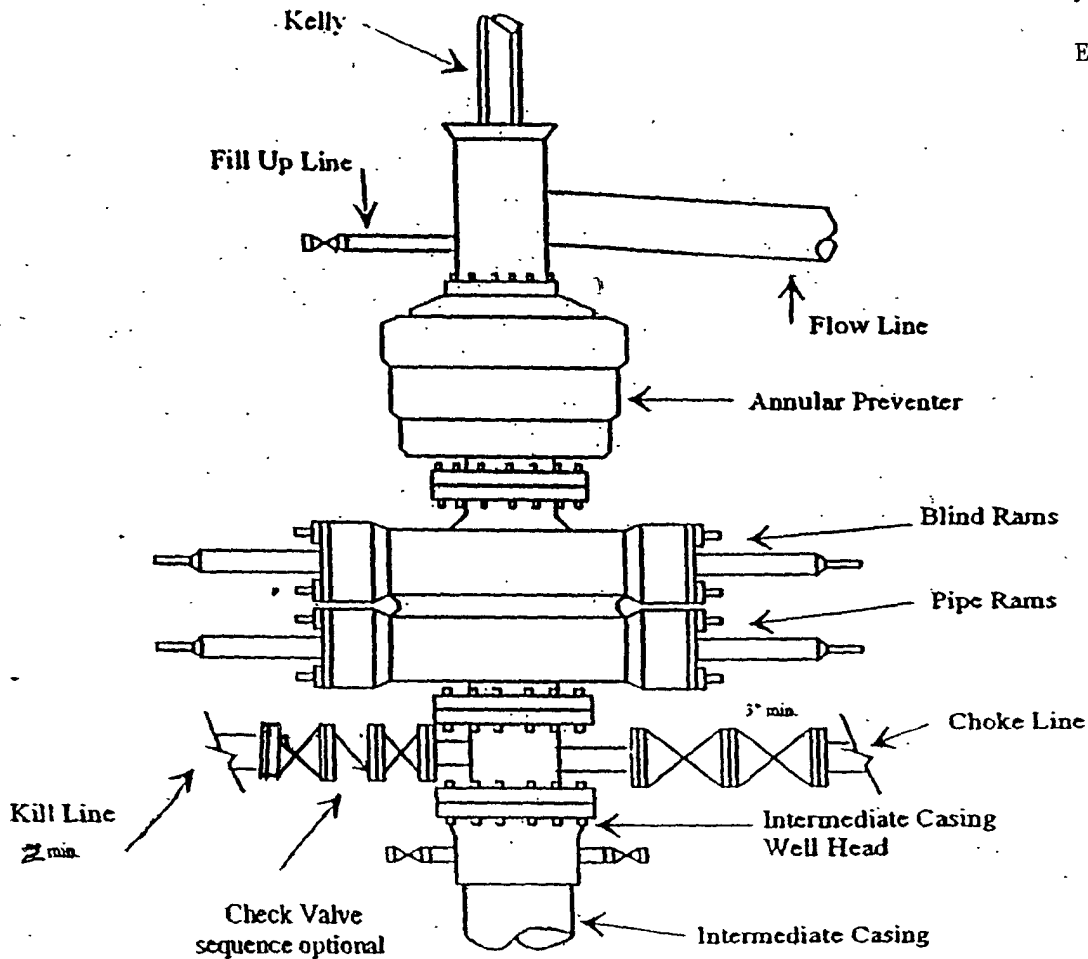
Typical 3,000 psi Pressure System
Schematic

Annular with Double Ram Preventer Stack

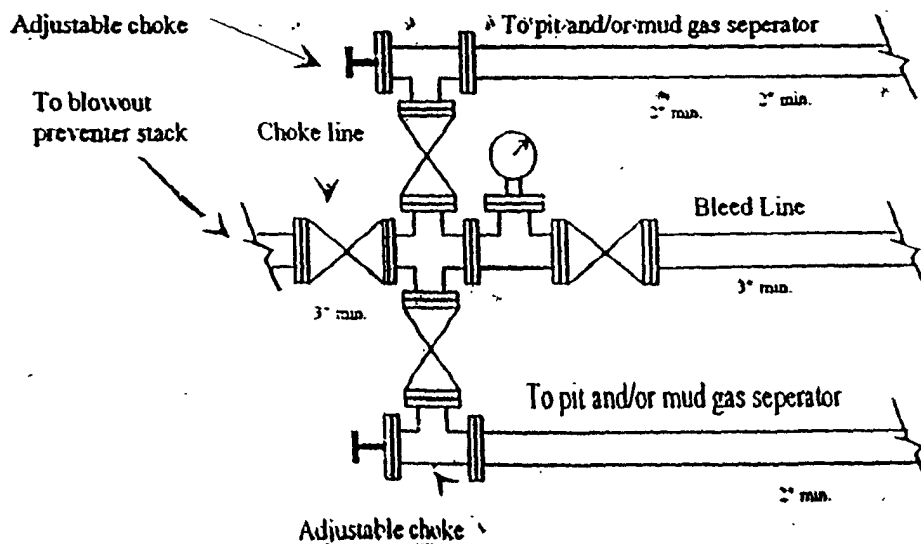
BOP-3

Federal HQ #2
860' FSL and 760' FWL
Section 5-T21S-R22E
Eddy County, New Mexico

Exhibit "C"



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



**MULTI-POINT SURFACE USE AND OPERATIONS PLAN
YATES PETROLEUM CORPORATION**

Federal HQ #2
860' FSL and 760' FWL
Section 5,-T21S-R22E
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.

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 46 miles Southwest of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS:

Go south of Artesia of Highway 285 for approximately 19 miles to Seven Rivers. Turn West on White Pine Road and go to the Marathon Plant Road. CR 401. Turn west on 401 and go 8 miles to CR 400 (old Car Body here) turn right on CR 400 and go approx. 8 miles. After crossing draw an old metal sign will be on the right. Turn right on lease road and 2.2 miles. Turn right here on lease road and go .4 miles to a gate. From here go 1.1 miles. Turn left and go approx. .5 of a mile to the Federal HQ #1. The new road will start going from the southwest corner of the HQ #1 for approx. .3 of a mile the road will then turn right and go approx. .1 of a mile to the southeast corner of the proposed well location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately .4 of a mile in length from point of origin to the southeast of the drilling pad. The road will lie in an 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. The new road will be bladed with drainage on one side. Some traffic turnouts will 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.

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 400' x 400' 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: Federal Surface, Administered by Bureau of Land Management, Carlsbad, 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:
Cy Cowan, Regulatory Agent
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

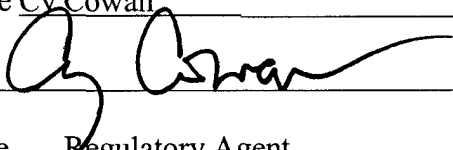
- B. Through Drilling Operations,
Completions and Production:
Pinson McWhorter,
Operations Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210
Phone (505) 748-1471

CERTIFICATION
YATES PETROLEUM CORPORATION
Federal HQ #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 _____ day of _____, 20_____.

Printed Name Cy Cowan

Signature 

Position Title Regulatory Agent

Address 105 South Fourth Street, Artesia, NM 88210

Telephone 505-748-4372

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) cy@ypcnm.com

VI. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts to the BLM.**
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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The 13-3/8 inch surface casing shall be set at **approximately 350** feet and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.

Medium cave/karst.

Possible lost circulation in the San Andres, Wolfcamp and Strawn formations.

Possible high pressure gas bursts in the Wolfcamp and over pressure in the Pennsylvanian Section.

- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a-d above.

Casing to be set at the base of the San Andres formation above the potentially oil bearing Glorietta formation at approximately 1400 feet.

Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. **Additional cement may be required.**

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi**.
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8" intermediate casing shoe shall be **3000 (3M) psi**.
- 4. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.

- a. The tests shall be done by an independent service company.
- b. The results of the test shall be reported to the appropriate BLM office.
- c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Freshwater/air mist is approved for surface and intermediate, but not air drilling.

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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

Engineer on call phone (after hours): Carlsbad: (575) 706-2779

WWI 120407