

#### Form 3160-3 OMB No. 1964-0136 (August 1999) Expires November 30, 2000 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NM-102005 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. REENTER $\mathbf{X}$ **DRILL** la. Type of Work 8. Lease Name and Well No. Single \_\_\_ Multiple Zone Oil Well Other h. Type of Well: Echo AWF Fed. #1 Zone Well 9 API Well No. 2. Name of Operator 30-015- 31547 Yates Petroleum Corporation 10. Field and Pool, or Exploratory 3b. Phone No (include area code) 3A. Address 105 South Fourth Street Wildcat Mississippian (505) 748-1471 Artesia, New Mexico 88210 11. Sec., T. R., M., or Blk, and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 1250' FNL & 1500' FWL Section 15, T21S-R21E same as above At proposed prod. Zone 12. County or Parish 13 State 14. Distance in miles and direction from nearest town or post office\* NM **Eddy County** Approximately 35 miles southwest of Artesia, NM 17. Spacing Unit dedicated to this well 16. No. of Acres in lease Distance from proposed\* location to nearest 1250' property or lease lime, it. (Also to mearest drig, unit line, if any) 320 W/2 320 20. BLM BIA Bond No. on file 19. Proposed Depth Distance from proposed location\* to neares: well, drilling, completed, applied for, on this lease, ft. 585997 7900 23 Estimated Juration 22. Approximate date work will start\* 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 30 Days **ASAP** 4731' 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form Bond to cover the operations unless covered by an existing bond on tile (see 1. Well plat certified by a registered surveyor Item 20 above) 2 A Drilling Plan Operator certification 3 A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office authorized office Name (Printed/Typed) 25. Signature 11/6/00 Cy Cowan Title: Regulatory Agent Date Name (Printed Typed) Approved by (Signature) John Title 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

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

\*(Instructions on reverse)

Conditions of approval, if any, are attached.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND

States any false, fletitious or fraudulent statements or representations as to any matter within its jurisdiction

State of New Mexico Energy, Minerals & Natural Resources Form C-102 Revised March 17, 1999

District II

811 South First, Artesia, NM 88218

Pleate III

1000 Rio Brance Rd., Aztoc. NM 87410

District (V

2848 South Pacheco, Santa Fe, NM 87585

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505 Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

AMENDED REPORT
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Numi	er Pool Code	Post Name
		Wildcat Mississippian
Property Code	Property Name	* Well Number
	ECHO "AWF" FEDERAL	1
OGRID No.	Operator Name	Elevation
025575	YATES PETROLEUM CORPORATION	4731.

Surface Location

UL or let me.	Section	Towaship	Range	Let ide	Post from the	North/South line	Feet from the	East/West line	County
С	15	21-S	21-E		1250	NORTH	1500	WEST	EDDY

11 Bottom Hole Location If Different From Surface

UL, or let me.	Section	Township	Range	Let idn	Foot from the	North/South line	Feet from the	East/West Has	County
17 Dudicated Acres	" John or	infil H	ensulidades (	ode Co	der No.				
320	<u> </u>								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL AL INTERESTS HAVE BEEN CONSOLIDATED OR A

	NON-STANI	ARD UNIT HAS BEEN APPROVED BY THE DIVISION
6		17 OPERATOR CERTIFICATION  I horeby certify that the information contained herein is true and complete to the best of my knowledge and belief
150g	1250	1 Com
	, in the second	Signature Cy Cowan
NM-10	2.005	Primed Name Regulatory Agent Title November 6, 2000
701.70		Date  **ISURVEYOR CERTIFICATION  I heraby 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 bellef.
		OCTOBER 25 0 2000  Den/of Survey (N. 11.67/02)
,		REGISTER SURVEYOR STATE OF THE
		Complete No. 75412

#### YATES PETROLEUM CORPORATION

Echo AWF Federal #1 1250' FNL & 1500' FWL Sec. 15-T21S-R21-E Eddy County, New Mexico

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

Glorietta	1900'
ABO	3560'
Wolfcamp	4640'
Cisco	6000'
Strawn	7240'
Atoka	7750'
Mississippian	7860'
TD	7900'

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

Water: Approx 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)

<u>Hole Size</u>	Casing Size	Wt./Ft	<u>Grade</u>	Thread	Coupling	interval	Length
17 1/2" 12 1/4" 7 7/8"	13 3/8" 8 5/8" 5 1/2"		48# 24# 15.5# & 17#	H-40 J-55 S-95	LT&C	0-350° 0-1350° 0-7900°	350' 1350' 7900'

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

# Echo AWF Federal #1 Page 2

# B. CEMENTING PROGRAM:

Surface casing: 400 sx "C" + 2% CACL2 (Yld 1.32 Wt.15.6)

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)

Production Casing: TOC=4000, 775 sx Super "C" modified (Yld 1.63 wt. 13.0).

# 5. Mud Program and Auxiliary Equipment:

Interval	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
0-350'	Freshwater Air Mist	8.4	28	N/C
350'-1300'	Freshwater Air Mist	8.4	28	N/C
1300'-6600'	Cut Brine	8.6-9.0	28	N/C
6600'-TD	Salt Gel/Starch	9.0-9.5	30-34	<10

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 anticipated. DST's: As warranted.

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

Anticipated BHP:

PSI Anticipated Max. BHP: 175 TO: 350  $\circ$ From: Anticipated Max. BHP: 600 PSI 350' TO: 1300' From: PSI Anticipated Max. BHP: 3900 From: 1300 TO: 7900'

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 20 days to drill the well with completion taking another 15 days.

# MULTI-. JINT SURFACE USE AND OPERALIONS PLAN Yates Petroleum Corporation

Echo AWF Federal #1 1250' FNL & 1500' FWL Sec. 15-T21S-R21-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 36 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 on Highway 285 to Rock Daisy Road (23) and turn west and go to Armstrong Road (12). Turn South and go to Box Canyon Road (400) and turn left and go approximately .9 of a mile. The new road will start here going west.

# PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately .4 of a mile in length from the point southeast of the drilling pad. The 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. The new road will be bladed with drainage on one side. Some traffic turnout 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 not 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 no 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.

# Echo AWF Federal #1 Page 2

# 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to re-enter the proposed well with a salt brine system. The salt brine 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 closet 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.

#### 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 the Bureau of Land Management, Carlsbad, New Mexico.

# Echo AWF Federal #1 Page 3

# 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:

B. Through Drilling Operations, Completions and Production:

Cy Cowan, Regulatory Agent

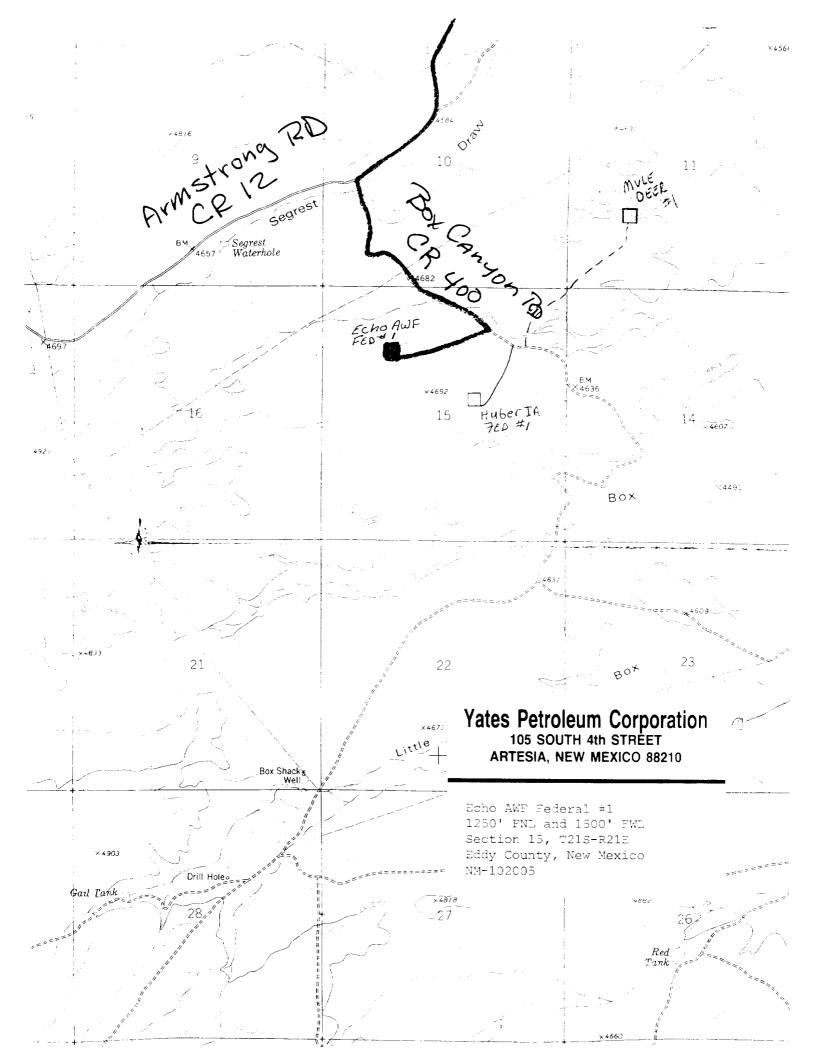
Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471 Pinson McWhorter, OperationsManager Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

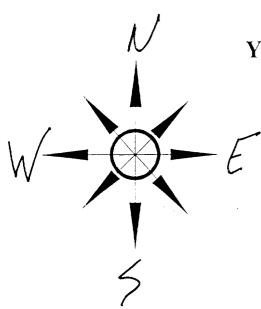
#### 14. CERTIFICATION:

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.

11/06/00

Regulatory Agent



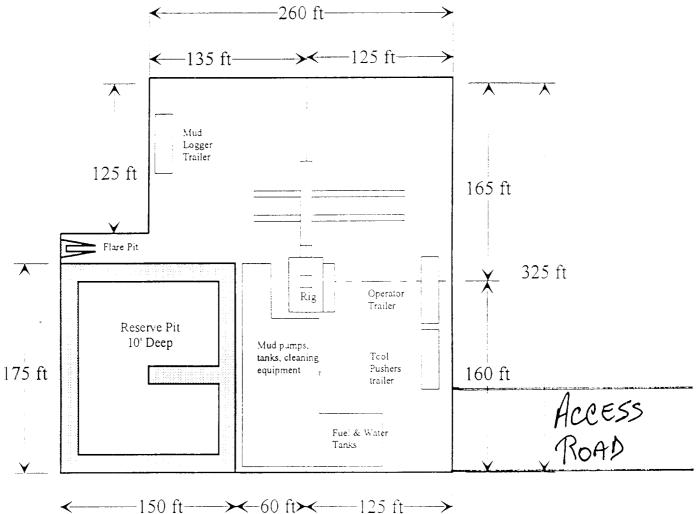


# Yates Petroleum Corporation

Location Layout for Permian Basin Up to 12,000'

# Yates Petroleum Corporation 105 SOUTH 4th STREET ARTESIA, NEW MEXICO 88210

Echo AWF Federal #1 1250' FNL and 1500' FWL Section 15, T21S-R21E Eddy County, New Mexico NM-102005



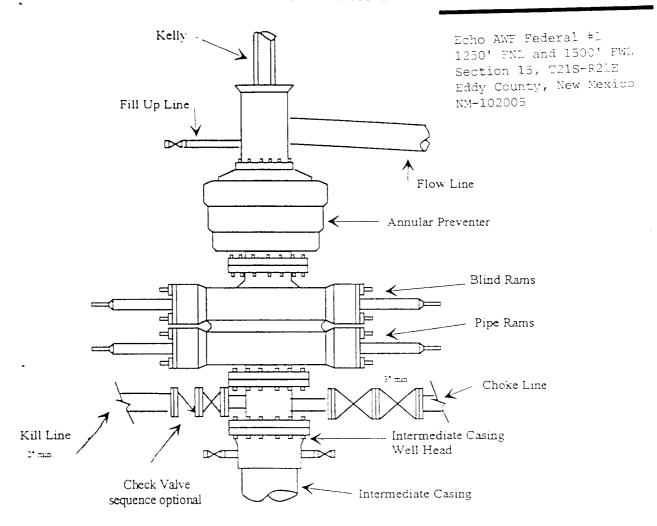
Distance from Well Head to Reserve Pit will vary between rigs

-335 ft-

The above dimension should be a maximum

# Yates Petroleum Corporation

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



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

