

RECEIVED

SEP 14 2005

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-045276
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 type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Yates Petroleum Corporation		7. If Unit or CA Agreement, Name and No. 17349
3A. Address 105 South Fourth Street Artesia, New Mexico 88210		8. Lease Name and Well No. 17349 Diamond AKI Federal #5
3b. Phone No. (include area code) (505) 748-1471 JUNDIS		9. API Well No. 30-015-32990
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 990' FNL and 660' FWL, Unit D At proposed prod. Zone Same		10. Field and Pool, or Exploratory Cementing Morrow
14. Distance in miles and direction from nearest town or post office* Approximately 30 miles SW of Artesia, New Mexico.		11. Sec., T., R., M., or Blk, and Survey or Area Section 34, T20S-R24E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 990'	16. No. of Acres in lease 2189.42	17. Spacing Unit dedicated to this well 320 acres, W/2
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 3000'	19. Proposed Depth 9500'	20. BLM/BIA Bond No. on file NM-2811
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3751'	22. Approximate date work will start* ASAP	23. Estimated duration 30 days
24. Attachments Carlsbad 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. | 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. |

26. Signature <i>Debbie L. Caffall</i>	Name (Printed/Typed) Debbie L. Caffall	Date 8/9/2005
Title: Regulatory Technician/Land Department		
Approved by (Signature) <i>/s/ Joe G. Lara</i>	Name (Printed/Typed) /s/ Joe G. Lara	Date SEP - 9 2005
Title: ACTING FIELD MANAGER		
Office: CARLSBAD FIELD OFFICE		

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.

APPROVAL FOR 1 YEAR

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)

Previously Approved

C-144 attached

WITNESS

9 5/8" CEMENT JOB

29.5

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

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

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name Wildcat Morrow	
⁴ Property Code		⁵ Property Name DIAMOND AKI FEDERAL			⁶ Well Number 5
⁷ OGRID No. 025575		⁸ Operator Name Yates Petroleum Corporation			⁹ Elevation 3751'

¹⁰ Surface Location

UL or lot no. D	Section 34	Township 20S	Range 24E	Lot Idn	Feet from the 990	North/South line North	Feet from the 660	East/West line West	County Eddy
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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
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¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
				Signature 	
				Printed Name Cy Cowen	
				Title Regulatory Agent	
Date 8/5/2003				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.	
Date of Survey				REFER TO ORIGINAL PLAT	
Signature and Seal of Professional Surveyor:				Date of Survey	
Certificate Number				Signature and Seal of Professional Surveyor:	

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

District II
811 South First, Artesia, NM 88210

District III
1800 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 Wildcat Morrow	
Property Code		Property Name DIAMOND AKI FEDERAL			Well Number 5
OGRID No. 025575		Operator Name YATES PETROLEUM CORPORATION			Elevation 3751.

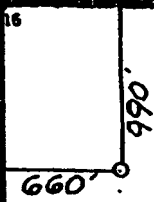
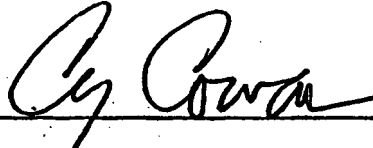
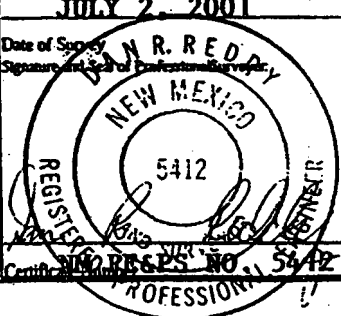
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	34	20-S	24-E		990	NORTH	660	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 320.00		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

¹⁶  NM-0452 76				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Cy Cowan Printed Name Regulatory Agent Title July 19, 2001 Date	
Diamond AKI 76D#2				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. JULY 2, 2001 Date of Survey Signature and Seal of Professional Surveyor  REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO 5412 R. REDDY 5412	

YATES PETROLEUM CORPORATION
Diamond AKI Federal #5
 990' FNL & 660' FWL
 Sec. 34-T20S-R24E
 Eddy County, New Mexico

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

San Andres	570'	Canyon Dolomite	7670'
Glorietta	2060'	Strawn	8200'
Bone Spring	3580'	Atoka	8820'
Wolfcamp	5640'	Morrow	8990'
Cisco Canyon	7520'	TD	9500'

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

Water: Approx 200' - 300'
 Oil or Gas: All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 9 5/8" casing and rated for 3000 BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

Auxiliary Equipment:

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>Thread</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	9 5/8"	36#	J-55	ST&C	0-1100'	1100'
8 3/4"	7"	26#	J-55	LT&C	0-400'	400'
8 3/4"	7"	23#	J-55	LT&C	400'-5200'	4800'
8 3/4"	7"	26#	J-55	LT&C	5200'-7300'	2100'
8 3/4"	7"	26#	N-80	LT&C	7300'-9500'	2200'

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

B. CEMENTING PROGRAM:

Surface casing: 200 sx Thixad + 1% CaCl₂ + 10#/sx Gilsonite+ ¼# Celloflake (YLD 1.52, WT 14.6). 800 sx Lite "C" (YLD 2.0, WT 12.5). Tail in w/200 sx C+2% CaCl₂ (YLD 1.34, WT 14.8).

Production Casing: Lead w/750 sx Lite "H" (YLD 1.99, WT 12.4). Tail in w/400 sx super 'C' modified. (YLD 1.57, WT 13).

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
Spud to 1100'	FW Gel/LCM	8.3-8.6	30	N/C
1100'-5200'	FW	8.3-8.6	28	N/C
5200'-7400'	Cut Brine	9.0-9.2	29	N/C
7400'-8000'	Cut Brine/Starch	9.0-9.3	30-34	N/C
8000'-9500'	Salt Gel/Starch	9.3-9.8	32-36	<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 from 3500' to TD.

Logging: Platform Express, Possible FMS, Rotary Sidewall cores.

Coring: AS warranted.

DST's: As warranted, possible in Morrow.

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

From: O	TO: 1100'	Anticipated Max. BHP:	500	PSI
From: 1100'	TO: 9500'	Anticipated Max. BHP:	4700'	PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H₂S Zones Anticipated: None

Maximum Bottom Hole Temperature: 165° F

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 10 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
Yates Petroleum Corporation
Diamond AKI Federal #5
990' FNL & 660' FWL
Sec. 34-T20S-R24E
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 30 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. Turn west for approx. 8.5 miles then turn south and go approx. 3.6 miles on Sawbuck Road. Go south on caliche road for approx. 2 miles, turn west and go approx. 1 mile, turn northwest on two-track road for approx. 0.5 of a mile. The new road will start here.

2. PLANNED ACCESS ROAD.

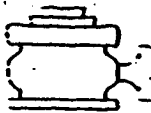
- A. The proposed new access will be approximately 200 feet in length from the point of origin to the southwest corner of the drilling pad. The road will lie in a southeast northwest direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on one side. Traffic turnout may be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

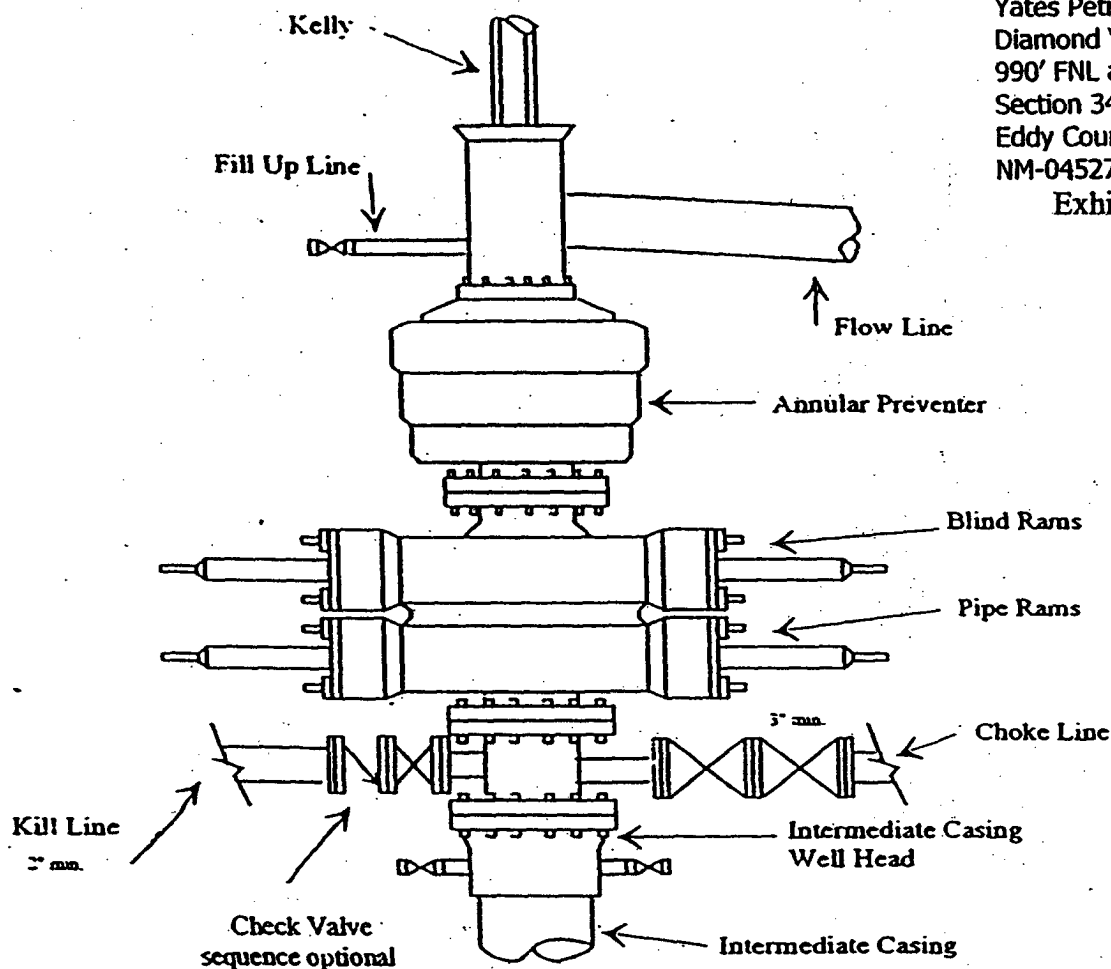
- A. There are production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.



Yates Petroleum Corporation

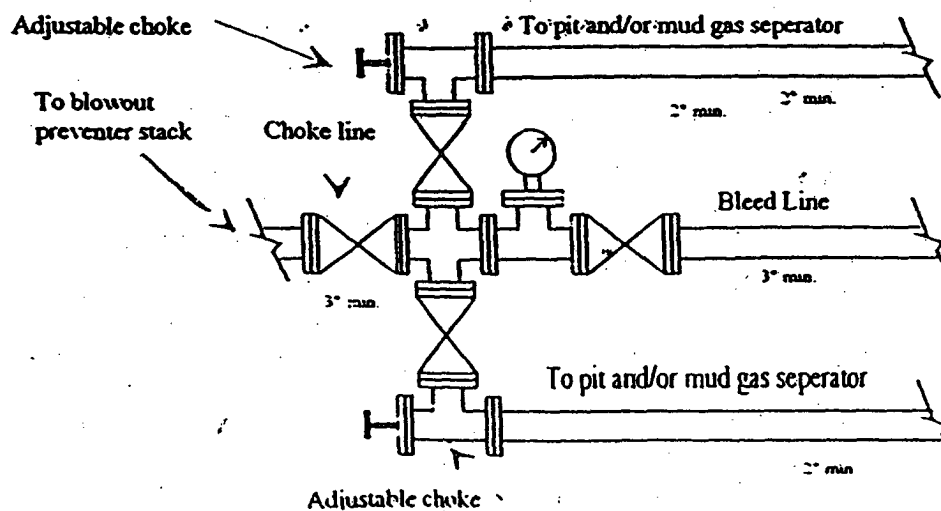
BOP-3

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



Yates Petroleum Corporation
Diamond "AKI" Federal #5
990' FNL and 660' FWL
Section 34-T20S-R24E
Eddy County, New Mexico
NM-045276
Exhibit "B"

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



CONDITIONS OF APPROVAL - DRILLING

Operator's Name: YATES PETROLEUM CORPORATION
Well Name & No. 5 - DIAMOND AKI FEDERAL
Location: 990' FNL & 660' FWL - SEC 34 - T20S - R24E - EDDY COUNTY
Lease: NM-045276

.....

I. DRILLING OPERATIONS REQUIREMENTS:

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

A. Spudding

B. Cementing casing: 9-5/8 inch 7 inch

C. BOP tests

2 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

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

II. CASING:

1. The 9-5/8 inch surface casing shall be set at 1100 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 7 inch production casing is **cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.**

(ORIG. SGD.) LES BABYAK

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 9-5/8 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) is **3000** psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.
 - BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. DRILLING MUD:

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

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