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OCD-ARTESIA

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.

NM-045276

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

Diamond AKI Federal #4

9. API Well No.

30-015-31992

10. Field and Pool, or Exploratory

Wildcat Morrow

11. Sec., T., R., M., or Blk, and Survey or Area

Section 33, T20S-R24E

12. County or Parish

Eddy County

13. State

NM

1a. Type of Work: ☒ DRILL☐ REENTER

b. 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 1800' FSL and 660' FEL
At proposed prod. Zone Same

14. Distance in miles and direction from nearest town or post office*

Approximately 30 miles southwest of Artesia, New Mexico.

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

1800'

16. No. of Acres in lease

2189.42

17. Spacing Unit dedicated to this well

320 acres E/2

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

1000'

19. Proposed Depth

9500'

20. BLM/BIA Bond No. on file

NM-2811

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

3762'

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.

2. A Drilling Plan.

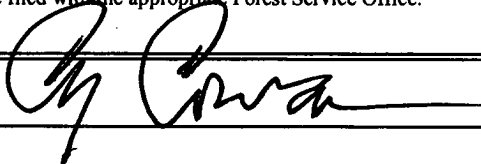
3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO shall be filed with the appropriate Forest Service Office.

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



Name (Printed/Typed)

Cy Cowan

Date

9/29/03

Title:

Regulatory Agent

Approved by (Signature)

/s/ Joe G. Lara

Name (Printed/Typed)

/s/ Joe G. Lara

Date

NOV 2003

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.

APPROVAL FOR 1 YEAR

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)

PREVIOUSLY APPROVED

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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
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 4
⁷ OGRID No. 025575	⁸ Operator Name Yates Petroleum Corporation	⁹ Elevation 3762'

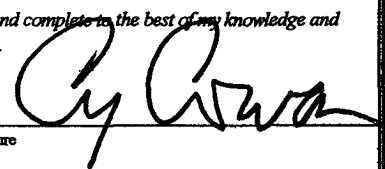
¹⁰ Surface Location

UL or lot no. I	Section 33	Township 20S	Range 24E	Lot Idn	Feet from the 1800	North/South line South	Feet from the 650	East/West line East	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
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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-045276		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 09/29/03 Date
				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. REFER TO ORIGINAL PLAT Date of Survey Signature and Seal of Professional Surveyor: Certificate Number
			660'	
			1800'	

District I
1725 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

Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, N M 87505

State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Dagger Draw Upper Penn South
Property Code	Property Name	Well Number
	DIAMOND AKI FEDERAL	4
OGRID No.	Operation Name	Elevation
025575	YATES PETROLEUM CORPORATION	3772

Surface Location

UL or Lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
I	33	20-S	24-E		1800	SOUTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I HEREBY CERTIFY THAT THE INFORMATION 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 KNOWLEDGE AND BELIEF.
	Signature
	Printed Name Cy Cowan
	Title Regulatory Agent
Date July 30, 2001	
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 KNOWLEDGE AND BELIEF.	
Date of Survey JULY 25, 2001	
Signature and Seal of Registered Surveyor	

YATES PETROLEUM CORPORATION
Diamond "AKI" Federal #4
 1800' FSL & 660' FEL
 Sec. 33-T20S-R24E
 Eddy County, New Mexico

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

San Andres	500'	Strawn	8330'
Glorietta	1980'	Atoka	8850'
Bone Spring	3520'	Morrow	9000'
Wolfcamp	5710'	TD	9500'
Cisco Canyon	7400'		
Canyon Dolomite	7550'		

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:

WITNESS 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

Maximun 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 #4

1800' FSL & 660' FEL

Sec. 33-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. 1.2 miles to the Diamond "AKI" Federal #2. The new road will start here going from the Northwest corner of the #2 location going in a northwesterly in direction.

2. PLANNED ACCESS ROAD.

- A. The proposed new access will be approximately 600 feet in length from the point of origin to the southeast 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.

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 closest 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 the 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

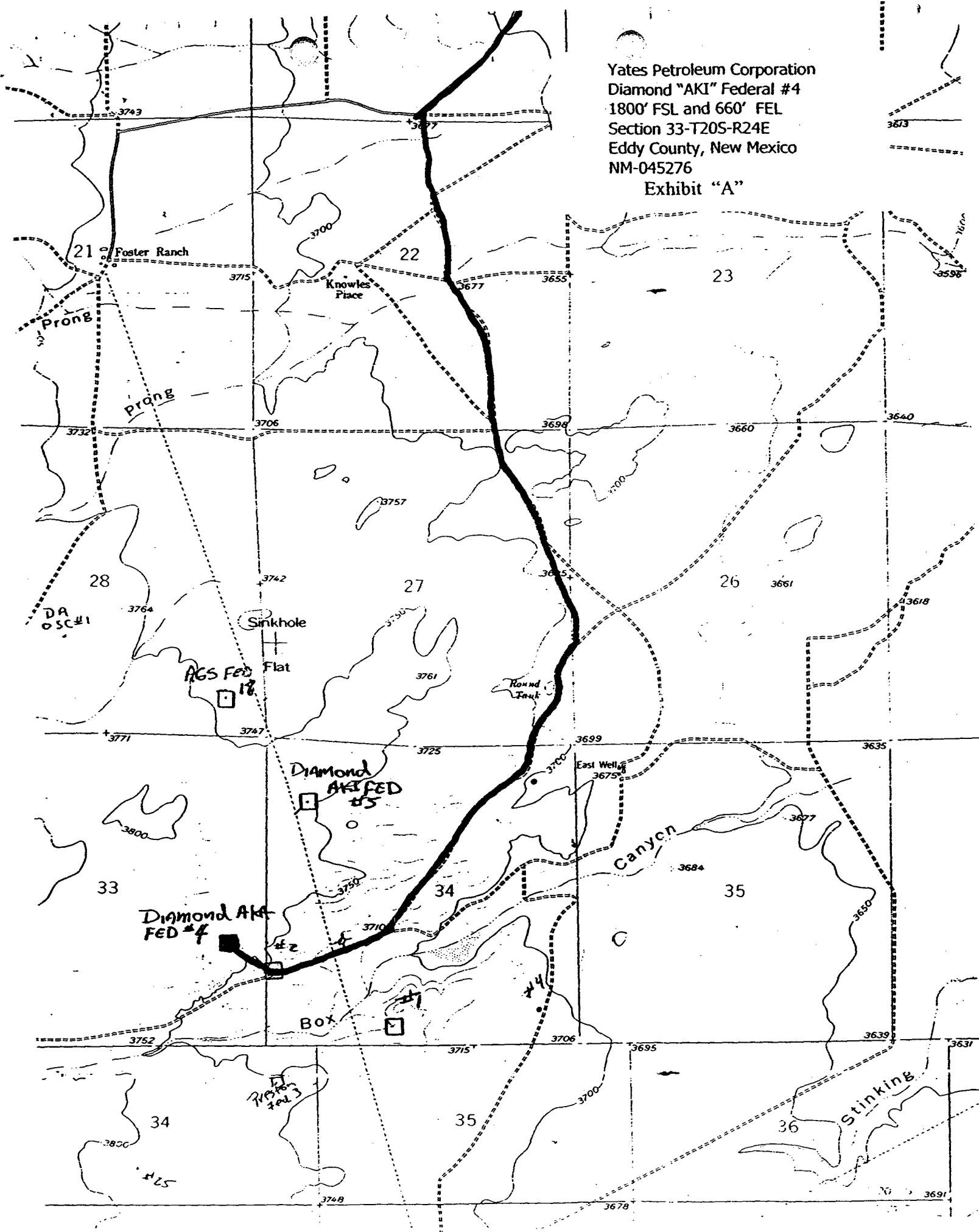
14. CERTIFICATION:

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.

09/29/03


Regulatory Agent

Yates Petroleum Corporation
Diamond "AKI" Federal #4
1800' FSL and 660' FEL
Section 33-T20S-R24E
Eddy County, New Mexico
NM-045276
Exhibit "A"



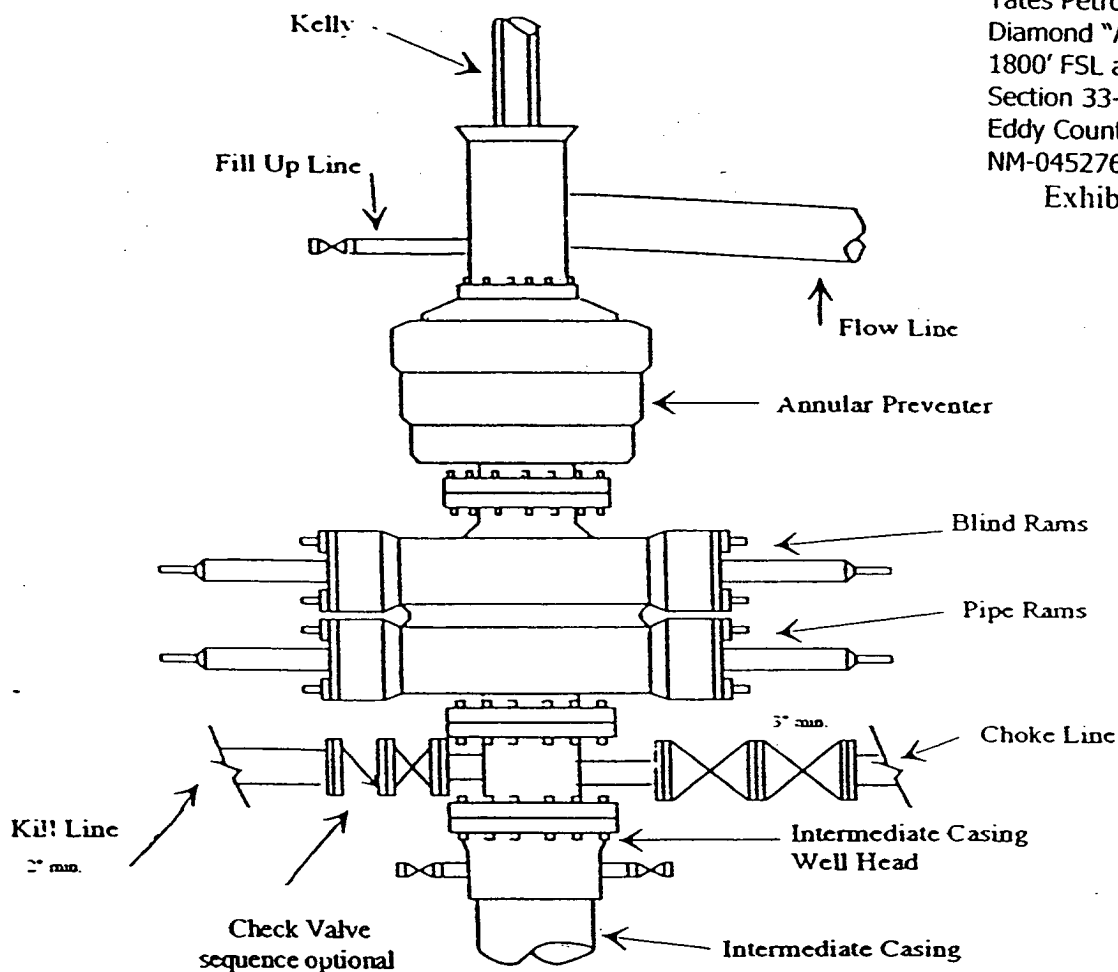


Yates Petroleum Corporation

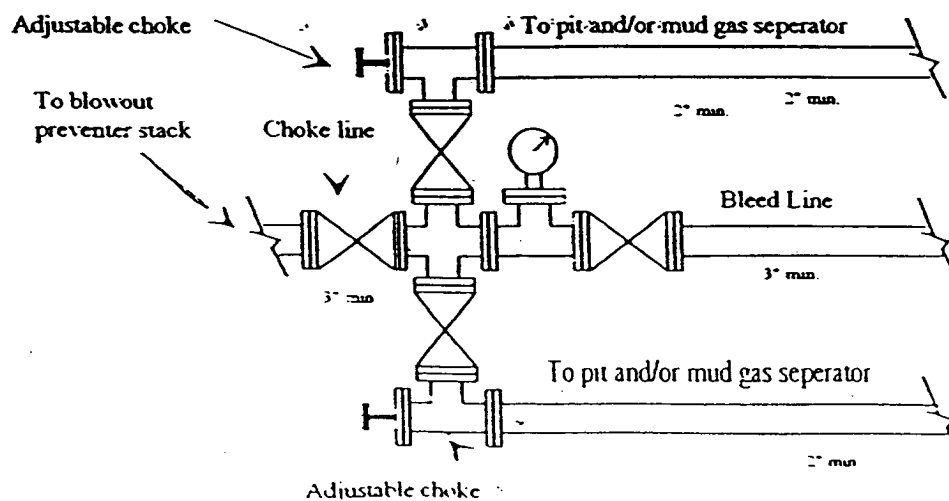
BOP-3

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

Yates Petroleum Corporation
Diamond "AKI" Federal #4
1800' FSL and 660' FEL
Section 33-T20S-R24E
Eddy County, New Mexico
NM-045276
Exhibit "B"



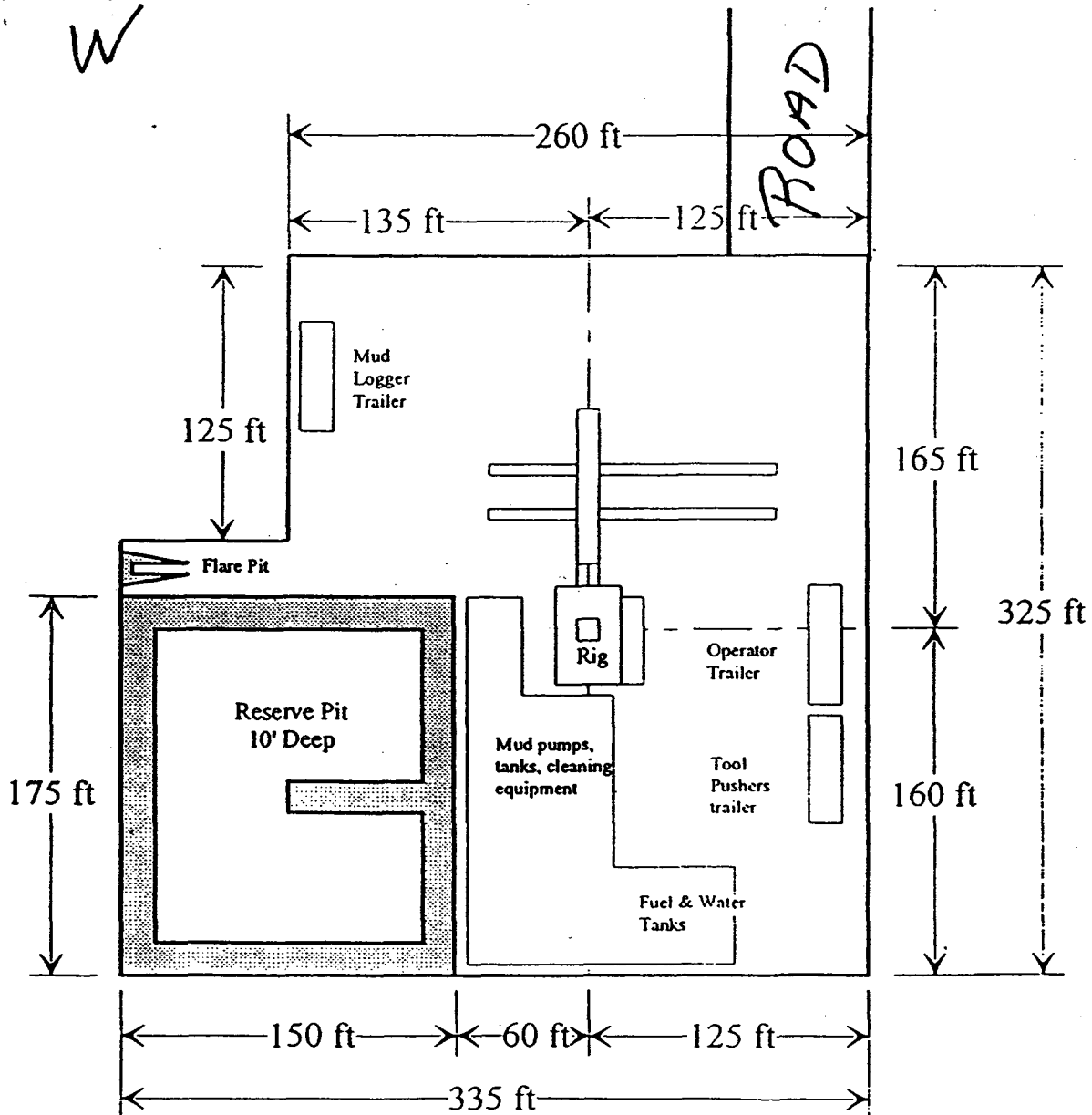
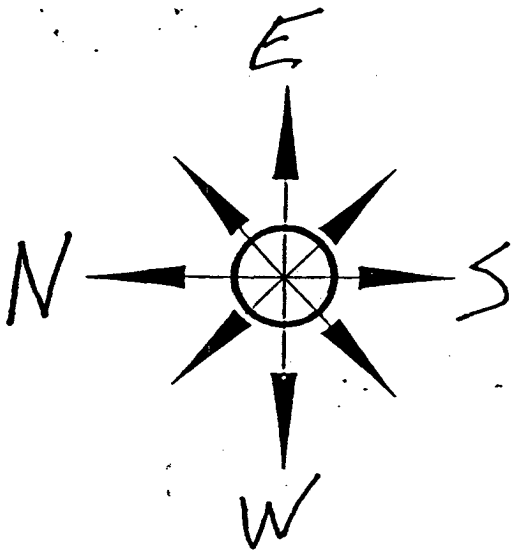
Typical 3,000 psi choke manifold assembly with at least these minimum features



Yates Petroleum Corporation

Location Layout for Permian Basin
Up to 12,000'

Yates Petroleum Corporation
Diamond "AKI" Federal #4
1800' FSL and 660' FEL
Section 33-T20S-R24E
Eddy County, New Mexico
NM-045276
Exhibit "C"



Distance from Well
Head to Reserve Pit
will vary between rigs

The above dimension
should be a maximum

Yates Petroleum Corporation
Diamond "AKI" Federal #4
1800' FSL and 660' FEL
Section 33-T20S-R24E
Eddy County, New Mexico
NM-045276

Exhibit "D"

