Joseph .

# N.M. Oil Cond. Div-Dist. To 1301 W. Care of Avenue

Artesia, New 60210

1011121372

JSF

Form 3160-3 (August 1999)

1077

UNITED STATES
DEPARTMENT OF THE INTERIOR

OMB No. 1004-0136 Expires November 30, 2000

DEPARTMENT OF THE I	NTERIOR /39 10	143	<ol><li>Lease Serial No.</li></ol>		
BUREAU OF LAND MANAC	NTERIOR SEMENT SEMENT SEMENT SEMENT SEMENT SEMENT SEMENT SEMENTER A SUMMER OF SEMENTER A SUMMER SEMENTER A SUMER SEMENTER A SUMMER SEMENTER A SUMMER SEMENTER A SUMMER SEMENTER A SUMER SEMENTER A SUMMER SEMENTER A SUMER SEMENTER A SUMMER SEMENTER SEMENTER A SUMMER SEMENTER SEMENTER SEMENTER A SUMMER SEMENTER	12.8. T.	NM-045276		
APPLICATION FOR PERMIT TO D	KILL OK KÆEN I ERKA 🕃	81/	6. If Indian, Allottee or	Tribe Name	
1a. Type of Work: X DRILL RE	ENTER RECENT	RIESIA O	7. If Unit or CA Agreen	nent, Name and No.	
		23/ 1	8. Lease Name and Wel		
b. Type of Well: Oil Well Gas U Other Well	Single Zone	Multiple Zone	Diamond AKI I	Federal #4	
2. Name of Operator  Yates Petroleum Corporation 25575	5 3 4		9. API Well No.	31992	
3A. Address 105 South Fourth Street	3b. Phone No. (include area code		10. Field and Pool, or Exploratory		
Artesia, New Mexico 88210	(505) 748-147	<u>'1                                    </u>	Wildcat Morrow		
4. Location of Well (Report location clearly and in accordance with any			11. Sec., T., R., M., or E	ilk, and Survey or Area	
At surface 1800' FSL a			04: 22 T20	S DOAE	
At proposed prod. Zone	ame	ad Water D	Section 33, T20	13. State	
14. Distance in miles and direction from nearest town or post office*		and samethy the	, ,	NM	
Approximately 30 miles southwest of Artesia, New 15. Distance from proposed*	16. No. of Acres in lease	17 Specing Ur	Eddy County it dedicated to this well	INIVI	
location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	2189.42	17. Spacing Of	320 acres E/2		
I8. 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 <b>585997</b>		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will	proximate date work will start* 23. Estimated duration			
3762'	ASAP	ASAP			
	24. Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil and Gas Order No. 1, shall b	e attached to this	form:		
1. Well plat certified by a registered surveyor.	4. Bond to cove	er the operations	unless covered by an exist	ing bond on file (see	
2. A Drilling Plan.	Item 20 abov	re).			
3. A Surface Use Plan (if the location is on National Forest System Land	ls, the 5. Operator cert	ification.			
SUPO shall be filed with the appropriate Forest Service Office.	6. Such other sin authorized of	•	ation and/or plans as may l	pe required by the	
25. Signature	Name (Printed/Typed)		Da	te	
y Owan	Cy Cowan			7/23/01	
Title:					
Regulatory Agent	Name (Printed/Typed)		Da	te	
Approved by (Signature)  /S/ JOE G. LARA	/S/ JC	DE G. LAF	RA S	EP 0 6 2001	
FIELD MANAGER			OFFICE	a na angang	
Application approval does not warrant or certify that the applicant holds operations thereon.  Conditions of approval, if any, are attached.	legal or equitable title to those right	nts in the subject	lease which would entitle t	ne applicant to conduct	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	crime for any person knowingly a	nd willfully to ma	ake to any department or as	gency of the United	
THE TO U.S.C. Section Tourand The 45 U.S.C. Section 1212, make it	. cc tor any person mich mery a		,,,	•	

\*(Instructions on reverse)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

APPROVAL FOR 1 YEAR

BUREAL OF LAND MOUT.

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BECEINED

District | 1825 N. French Dr. Hobbs, NM 88240

District II 811 South First, Artesia, NM 88210

District III 1000 Rio Brazos Rd., Aztec NM 87410 District N/ 2040 South Pacheco, Santa Fe, NM 87505

#### State of New Mexico Energy, Minerals & Natural Resources

### OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, N M 87505 Form C-102

Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

MENDED REPORT

	WE	ELL	LOCA	<b>JOIT</b>	1 \	ND AC	RE/	4GE	DE	EDICA	TION F	PLA1	Γ	
API	Number	Pool Code Pool Name												
Property Coo	de	Dagger Draw Upper Penn South Property Name Well Number												
		DIAMOND AKI FEDERAL 4												
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	Bottom Hole Location If Different From Surface													
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## 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: Oil or Gas:

Approx 200' - 300' All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 8 3/4" 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)

Hole Size	Casing Size	Wt./Ft	<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 <sup>3</sup> ⁄ <sub>4</sub> "	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

# Diamond "AKI" Federal #4 Page 2

#### B. CEMENTING PROGRAM:

Surface casing: 200 sx Thixad + 1% CaCl2 + 10#/sx Gilsonite+ ½# 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:

Interval Spud to 1100' 1100'-5200' 5200'-7400' 7400'-8000'	Type FW Gel/LCM FW Cut Brine Cut Brine/Starch	Weight 8.3-8.6 8.3-8.6 9.0-9.2 9.0-9.3	Viscosity 30 28 29 30-34	Fluid Loss N/C N/C N/C 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.

#### 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.

# Diamond "AKI" Federal #4 Page 2

#### 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.

# Diamond "AKI" Federal #4 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

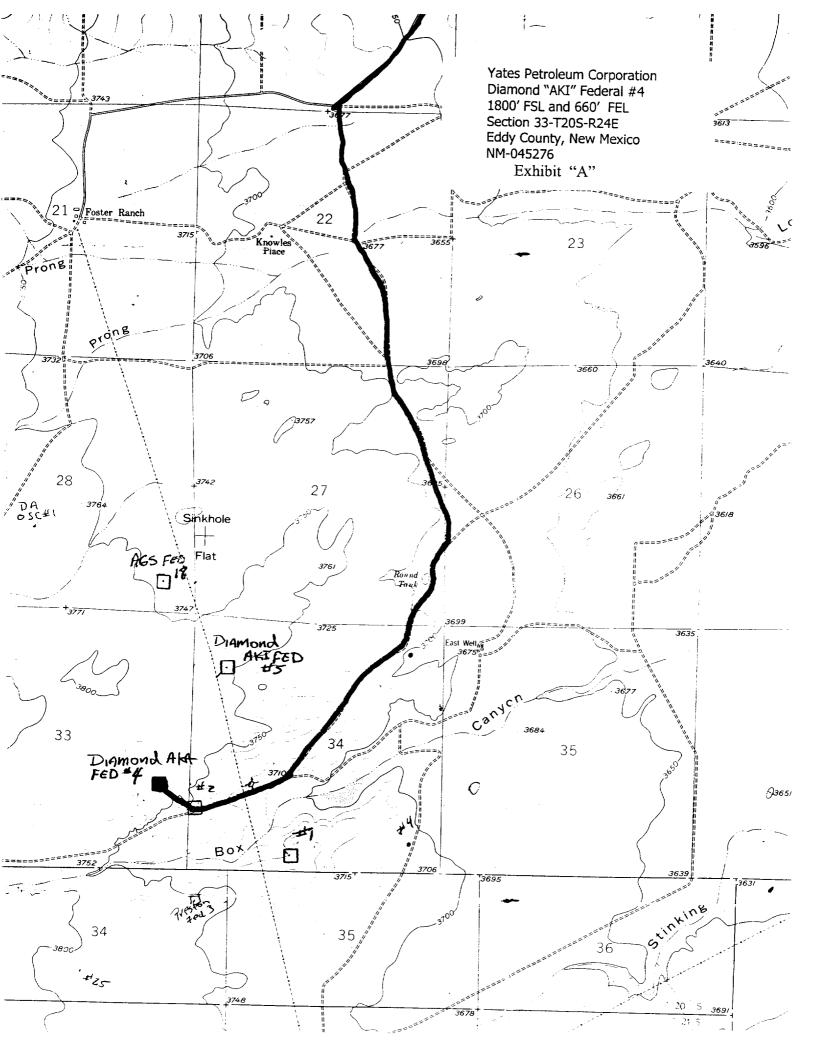
Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471 Pinson McWhorter, Operations Manager Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471

#### 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.

07/19/01

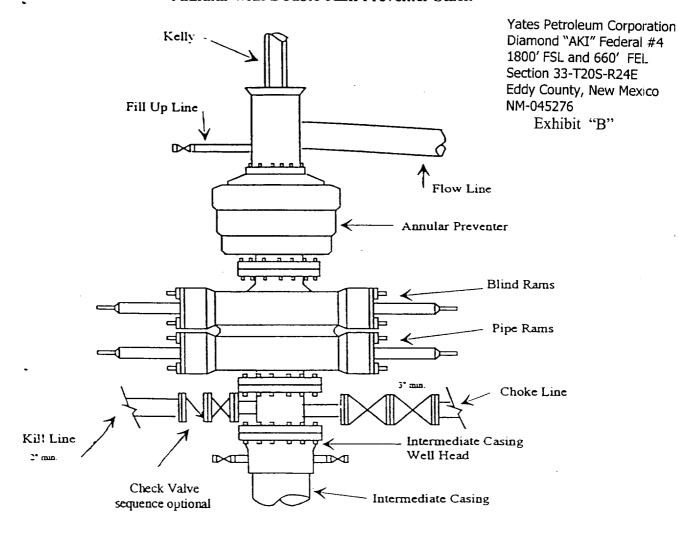
Regulatory Agent



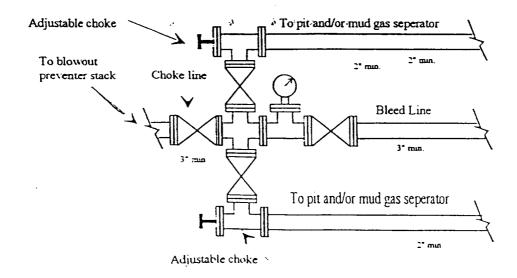


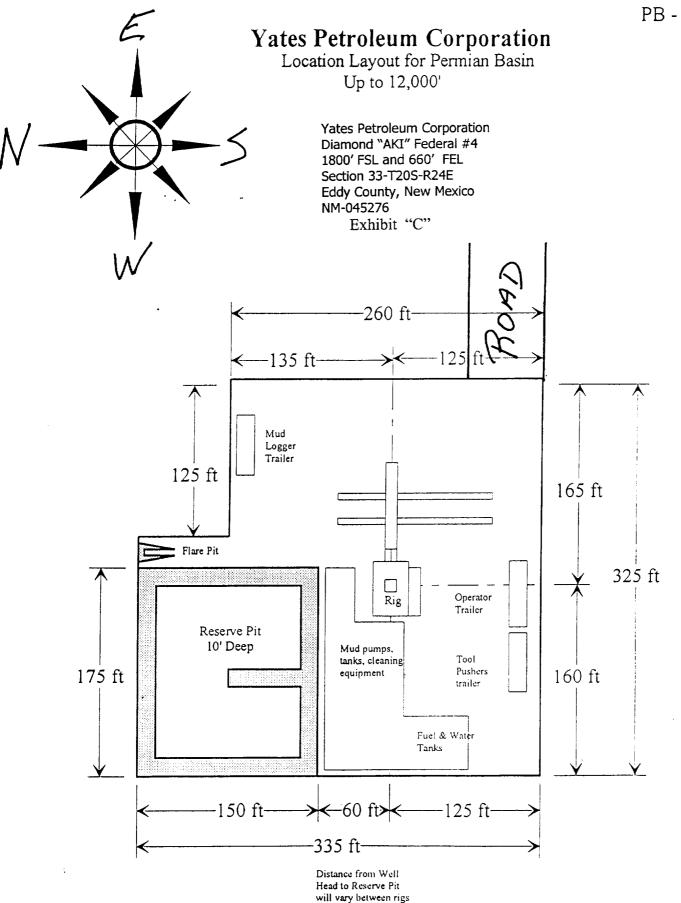
### Yates Petroleum Corporation

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



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





The above dimension should be a maximum

