# N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

Form 3160-3 (August 1999)

Amaia, NM 88210

OMB No. 1004-0136 Expires November 30, 2000

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

5. Lease Serial No. NM-045276

	••-		11111 0 10210		
APPLICATION FOR PERMIT TO	DRILL OR REENTER	1 2005 1 1 5 0 4 1	6. If Indian, Allottee or Trib	e Name	
	REENTER		7. If Unit or CA Agreement	Name and No.	
b. Type of Well: Oil Well Gas Other Well	Single Zone	Multiple Zone	8. Lease Name and Well No Diamond AKI Fede	<b>A</b>	
2. Name of Operator  Yates Petroleum Corporation (25575)			9 API Well No. 30-015-3	4425	
3A. Address 105 South Fourth Street Artesia, New Mexico 88210	3b. Phone No. (include area cod (505) 748-147	·	10. Field and Pool, or Explor	_ •	
4. Location of Well (Report location clearly and in accordance with	11. Sec., T., R., M., or Blk, and Survey or Area				
At surface 1800' FSL and	d 660' FEL, Unit I				
At proposed prod. Zone Same			Section 33, T20S-R24E		
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State	
Approximately 30 miles southwest of Artesia, N	ew Mexico.		Eddy County	NM	
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in lease 2189.42	17. Spacing Un	it dedicated to this well  320 acres E/2		
8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  1000'	19. Proposed Depth <b>9500'</b>	l · · · · l			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will	start*	23. Estimated duration		
3762' ASAP			30 days		
	24. Attachments	CARLSB	AD CONTROLLED WA	TER BASIN	
The following, completed in accordance with the requirements of Ons	hore Oil and Gas Order No. 1, shall b	e attached to this	form:		
Well plat certified by a registered surveyor.	4. Bond to cov	er the operations	unless covered by an existing	bond on file (see	

- 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.
- Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized office.

25. Signature	2000a	Name (Printed/Typed) Debbie L. Caffall	
Title:	587		

Regulatory Technician / Land Department

Approved by (Signature) /s/ James Stovall Name (Printed/Typed)
/s/ James Stovall

Date NOV 0 8 2005

10/6/2005

Date

Title

FIELD MANAGER

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

Office

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** 

C-144 Attached

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

WITNESS: 95/8" ( Ement Job

DISTRICT I 1625 E. Franch Dr., Hobbs, 122 22040 DESTRICT II 811 South First, Artenia, MR 65819 DISTRICT III

1000 His Brunes Rd., Autoc, HM 87410

DISTRICT IV 2046 South Pacheco, Santa Fe, RM 87505

API Number

# State of New Mexico Racray, Massale and Matural Resources Reportment

Form C-102 Roviced March 17, 1999 Instruction on back Submit to Appropriate Histrict Office

State Lease - 4 Copies Fos Lease - 3 Copies

# OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2086

Peci Cede

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

Wildcat Morrow

Property C	loda	Property Name Diamond AKI Federal  4						un ber		
025575		YATES PETROELUM CORPORATION 3762'								
Surface Location										
UL or lot No.	Section	Township	Range	Let idn	Fost from the	North/Se		Feet from the	East/Wost line	County
I	33	20S	24E		1800'	Sout	h	660'	East	Eddy
			Bottom	Hole Lo	cation If Diff	erent Fr	om Sur	face		
III. or lot No.	Section	Township	Range	Let Idn	Fact from the	North/So	eth line	Fost from the	East/Vest line	County
Budicated Acres	1	r Indii C	on solidation		der No.	<u> </u>			<u> </u>	<u> </u>
	Jount o		mangarata ang	Cods Ur	eer no.			•		
320	WARTER T	TIT DE A	COTON TO			TTANEET AT	Y YNDRA	NECES TABLE IN	THE COMMON IN	A STREET
NU ALLA	WADLE !				IT HAS BEEN			rests have hi The division	EEN CUNSULID	WIPD
		···		A CONTRACTOR OF THE PARTY OF						
									OR CERTIFICA	}
ļ	ļ								ny curtify the the is in is true and comp	
}				<b>3</b>				head of may have	uladge and belief.	
	}									
	]								2 Onto	
		·		Se la companya de la	<del></del>	<del></del>		Signature	Cy Cowan	
				# ** **				Printed Nam		
	l								gulatory Age	ent
								Title	rch 11, 200	_
					ŀ			Date	10n 11, 200.	
								SURVEY	OR CERTIFICA	ITON
				and the same of th		··· ·			ly that the well toos	
				at Explain	-			on the plat w	one gistled from fis	id makes of
								supervises, e	made by me or at that the same t	s true and
				Ç.		c.	660	ourrest to the	he best of my beli	≠
				A Paraga	1	•	[		ORIGINAL PI	LAT.
				i.				Bate Survey	od G	
				en Co Co		· · · · · · · · · · · · · · · · · · ·		70		
						80C'		AEW.	The second second	
					į	36		36	AN VIV	
	I				ļ	_		A TON		
					į			(Statement (	Service of some	RLS 3640
						g some vidg <del>e</del> noch	There was	A Cham	NUMBER OF COMPA	NY

# YATES PETROLEUM CORPORATION Diamond "AKI" Federal #4 1800' FSL & 660' FEL

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 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)

<b>Hole Size</b>	Casing Size	Wt./Ft	Grade	<b>Thread</b>	<u>Interval</u>	Length
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

# Diamond "AKI" Federal #4 Page 2

### B. CEMENTING PROGRAM:

Surface casing: 200 sx Thixad + 1% CaCl2 + 10#/sx Gilsonite+ 1/4# 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>	Fluid Loss
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.

# Diamond "AKI" Federal #4 Page 2

# 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.

#### 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.

# 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.

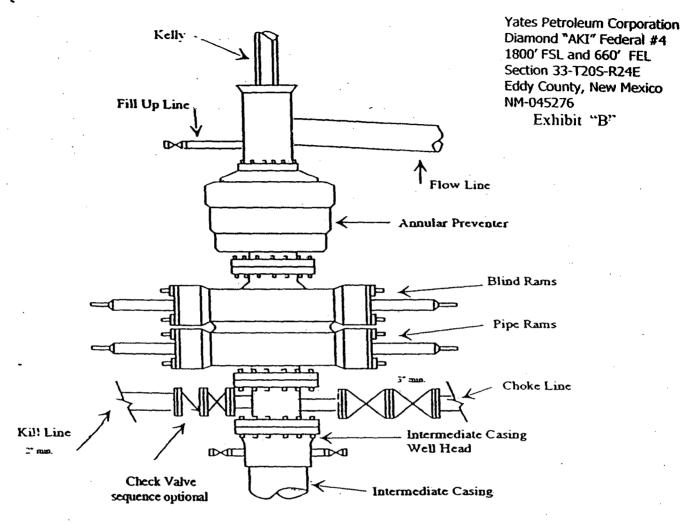
10/06/2005

Regulatory Agent

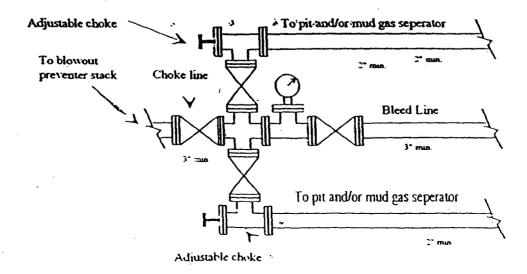


# Yates Petroleum Corporation

Typical 3.000 psi Pressure System
Schematic
Annular with Double Ram Preventer Stack



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



#### CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** 

YATES PETROLEUM CORPORATION

Well Name & No.

4 - DIAMOND AKI FEDERAL

Location:

1800' FSL & 660' FEL - SEC 33 - 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 <u>9-5/8</u> inch surface casing shall be set at <u>1100 feet</u>, 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 <u>cement shall extend</u> <u>upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.</u>

# 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 <u>9-5/8</u> 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.