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Form 3160-3 (August 1999)					FORM AP OMB No.		
(	UNITED STATES		*		Expires Nover	mber 30, 2000	
	DEPARTMENT OF THE IN BUREAU OF LAND MANAC		PEOPL		5. Lease Serial No. NM-02428		
APPLICAT	TION FOR PERMIT TO DR		OCA CEIVED		6. If Indian, Allottee	or Tribe Name	
				14			
1a. Type of Work: 🎽 DRILL		ર	100 100 - 20 - 20 - 20 - 20 - 20 - 20 -		7. If Unit or CA Agree 8. Lease Name and We	25528	
1b. Type of Well: 🔲 Oil Well	🕅 Gas Well 🔲 Other		Single Zone 🔲 Multi	ple Zone		Federal Com. #1	
2. Name of Operator	0	25	575		9. API Well No. 3/		
Yates Petroleum 3a. Address			lo. (include area code)		<u>30-0 5-</u> 10. Field and Pool, or E:		
105 South Fourt Artesia, NM 88	h Street 210	(505)	748-1471		Empire;Morro	w,South	
4. Location of Well (Report loca At surface C'6601 FNL	tion clearly and in accordance with a and 660' FWL	any State req	uirements.*)		11. Sec., T., R., M., or B	lk. and Survey or Area	
	me as above Un	it D			Section 10,	T18S-R29E	
14. Distance in miles and direction		eia Na	Marico		12. County or Parish Eddy	13. State NM	
Approximately 18 miles east of Artes 15. Distance from proposed*			1		g Unit dedicated to this we		
location to nearest property or lease line, ft. (Also to nearest drig. unit line,	if any) 660 '	40			320 Pest 3-31-11X		
<ol> <li>Distance from proposed location to nearest well, drilling, comple applied for, on this lease, ft.</li> </ol>		19. Propos	-		BLA Bond No. on file		
21. Elevations (Show whether DF,	KDB, RT, GL, etc.)		, 500 ' kimate date work will sta		59-97 23. Estimated duration	Maria	
3515'			ASAP		<u>30 days</u>	······································	
			achments				
<ol> <li>Well plat certified by a registered</li> <li>A Drilling Plan.</li> </ol>	ution is on National Forest System		<ol> <li>Bond to cover the ltem 20 above).</li> <li>Operator certific</li> </ol>	ne operation ation. specific info	form: is unless covered by an ex prmation and/or plans as		
25. Signature	p. M		e (Printed/Typed)	<u></u>	; D	Date	
Title Title	Juny 2	¦ Ke	en Beardemphl			1/14/2000	
Landman							
Approved by (Signature)	- 1. T. (1) <sup>177</sup>	Nam	e (Printed/Typed)			Date	
Title Assista	nt Field Manager,	Offi	ce		APPRO		
Acting Lands A Application approval does not warran operations thereon. Conditions of approval, if any, are at	nt or certify the the applicant holds le	gal or equita	ble title to those rights in	the subject l			
Title 18 U.S.C. Section 1001 and Ti States any false, fictitious or fraudule	tle 43 U.S.C. Section 1212, make it ent statements or representations as to	a crime for a	nny person knowingly an within its jurisdiction.	d willfully to	o make to any department	or agency of the United	
*(Instructions on reverse)							
CA	PITAN CONTECLLED		GI	ENERAL PECIAL	L SUBJECT TO REQUIREMEN STIPULATIONS	TS AND	
			Δ7	TACHE	- <b>D</b>		

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# SANGERER MERICENTER MERICENTER 1999 WHITE DIS 3P 3ECEIAED

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Form C March 17, 1	Revised		5	Mexico atural Resources	ate of New Ainerals & N	Energy.		M 98240	., Hobbs, N	<u>District 1</u> 1625 N. Prench Dr Diseater 11
te District O Lease - 4 Co Lease - 3 Co	Subn	OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505					District II 811 South First, Arteola, NM 88210 District III 1000 Rin Brazos Rd., Aster, NM 87418			
NDED REPO	·					ATION	ELL LO		io, Santa Pe,	<u>District IV</u> 2048 South Pachec
	South	Morrow		Empire		<sup>T</sup> Pool Code	1	r	VI Numbe	7
ell Number	<b>w</b> 1			<b>2</b> 14	Property N. L COM	' FEDER	ZA "AUD	CABE	Ceda	Property C
<b>Elevation</b> 507.	1				<sup>COPERMENT</sup> N PORATION	LEUM CC	S PETRO	YATES		02557
			_		Surface L					
C. EDDY	East/West Mac WEST	Feet from the 660		North/South line NORTH	Feet from the	Lot Ma	Range	Terradip	Section	UL or lot m.
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Ć.	East/West line	Past from the		North/South line	Fort from the	Let Ma	Range	Tournahip	Section	UL, or lot as.
				l	io.	ide <sup> </sup> Orde	ensetidation C	laffit "C	" Joáns or	Budicated Acres 320

82120-WN	٨	"OPERATOR CERTIFICATION I haveby certify that the information contained herein is true and complete to the best of my knowledge and belief
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D-J- J- Bland Lause 2 theo	B-5524	Insurvey on the second
1/13 1/13	B-X77	R. REDO REDO 5412 HULLION 5412 HULLION 100 100 100 100 100 100 100 10
		A OFESSION A



### **ATES PETROLEUM CORPORAT.** Cabeza AUD Federal Com. #1 660' FNL & 660' FWL Sec. 10-T18S-R29-E Eddy County, New Mexico

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

Salt	846'
Base Salt	2247'
Yates	3037'
San Andres	7002'
Bone Spring Lime	7910
Wolfcamp	8312
Upper Penn	9426
Strawn	10002
Atoka	10358
Morow Clastics	10852
Lower Morrow	10992
Chester Lime	11339
TD	11500'

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

Water: Approx 150' - 200' Oil or Gas: All Potential Zones

3. Pressure Control Equipment: BOPE will be installed on the 8 5/8" casing and rated for 5000 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	<u>Wt./Ft</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	Interval	<u>Length</u>
14 3/4" 11″ 11″	11 3/4″ 8 5/8″ 8 5/8″	42# 26# 32#	H-40 J-55 J-55	ST&C ST&C ST&C		0-350' 0-2200' 2200'-3000'	
7 7/8" 7 7/8" 7 7/8" 7 7/8"	5 1/2" 5 1/2" 5 1/2" 5 1/2"	17# 17# 17# 17#	L-80 J-55 N-80 S-95	LT&C LT&C LT&C LT&C		0-2100' 2100'-7600' 7600'-10400' 0400'-11500'	

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

# Cabeza AUD Federal Com. #1 Page 2

#### B. CEMENTING PROGRAM:

Surface casing: 200 sx "C" (Yld 1.32 Wt.14.6); Tail in w/200 sx "C" + 2% CaCl2 (Yld 1.32 Wt. 14.6).

- Intermediate: 1500 sx Lite (Yld 2.05 Wt. 12.6); Tail in w/200 sx "C" (Yld 1.32 Wt 14.6)
- Production: (TOC = 2500') 600 sx Lite (Yld 2.05 Wt. 12.6); Tail in w/500 sx Super "C" (Yld 1.67 Wt 13.0) Note: Nitrified mud will be used ahead of cement.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	Type	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-350'	FW Gel/Paper	8.6-9.0	32-36	N/C
350' - 3000'	Brine	10.0-10.2	28	N/C
3000'-10000'	Cut Brine	8.8-9.3	28	N/C
10000'-11500'	Salt Gel/Starch/Drispac	9.5-10.0	32-40	<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 ot from under surface casing.
Logging: PEX/HALS to casing, CNL-GR on up to surface; BHG - TD to casing.
Coring: None anticipated.
DST's: As warranted.

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

From:	0	TO:	350	Anticipated Max. BHP:	150	PSI
From:	350	TO:	3000	Anticipated Max. BHP:	1300	PSI
From:	3000	TO:	TD	Anticipated Max BHP:	5750	PSI

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

MULTI-INT SURFACE USE AND OPERA. NS PLAN Yates Petroleum Corporation Cabeza AUD Federal Com. #1 660' FNL & 660' FWL Sec. 10-T18S-R29-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.

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 18 miles east of Artesia, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

**DIRECTIONS:** 

Go east of Artesia on Highway 82 to Old Loco Road (210). Turn south and go approximately 3.3 miles and location will be on the east side of road.

- 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 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.

Cabeza AUD Federal Com. #'. 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.
- 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.

# Cabeza AUD Federal Com. 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:

Ken Beardemphl, Landman Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210 Phone (505) 748-1471 B. Through Drilling Operations, Completions and Production:

> Brian Collins, 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.

01/14/2000





# Typical 5,000 psi choke manifold assembly with at least these minimun features







175 ft

Head to Reserve Pit will vary between rigs

tanks, cleaning

equipment

Tool

Pushers

160 ft

The above dimension should be a maximum

