	SECRETARY'S	натоя					ATS-11-919	
Form 3160-3 August 2007)	• = •			~)	FORM AP OMB No. 10 Expires July	004-0137	
	UNI DEPARTMEN BUREAU OF APPLICATION FOR P	TED STATES It of the inte	RIOR	OCO HI	bb s	5. Lease Serial No. NM-59392		
	BUREAU OF APPLICATION FOR P	LAND MANAGE	MENT .L OR	REENTER 06	5012	6. If Indian, Allotee or	Tribe Name	
· - · · ·				FED	CEIVED	7. If Unit or CA Agreem	ent, Name and No.	
la. Type of work:				R		8. Lease Name and We	11 No -2100-0	
			🖌 Sin	gle Zone 🔲 Multij	ole Zone	Lusk AHB Federa		
2. Name of Operat	tor Yates Petroleum Corpor	ation	6	25575	· > .	9. API Well No.	40990	
3a. Address 105 Artes	S. Fourth St. sia, NM 88210		hone No. -748-41	(include area code) 20		10. Field and Pool, or Exp Undesignated/2nd E		
4. Location of We	ll (Report location clearly and in	accordance with any State	requireme	ents.*)		11. Sec., T. R. M. or Blk.		
	0' FNL & 660' FWL nd. zone 330' FSL & 660' FW	L				Section 35, T19S-32	Ę	
	and direction from nearest town by 37 miles from Carlsbad	or post office*				12. County or Parish Lea	13. State NM	
15. Distance from pr location to neare property or lease	roposed* st line, ft. 150'		626.08			ng Unit dedicated to this well		
(Also to nearest 18. Distance from pr	drig. unit line, if any)	19.	Proposed	Depth		BIA Bond No. on file		
to nearest well, d applied for, on th	rilling, completed, 1800' is lease, ft.	100	-) D (Pilot Hole)	NAT	IONWIDE BOND #NM	B000434	
21. Elevations (Sho 3574' GL	w whether DF, KDB, RT, GL,	· ·	Approxin 17/2012	nate date work will sta 2	rt*	23. Estimated duration 30 days		
		24	Attac	hments		I		
The following, compl	eted in accordance with the requ	rements of Onshore Oil	and Gas(Order No. 1, must be a	ttached to th	is form:		
2. A Drilling Plan.	by a registered surveyor.			Item 20 above).	-	ons unless covered by an ex	isting bond on file (see	
3. A Surface Use P SUPO must be fi	lan (if the location is on Nation led with the appropriate Forest So	al Forest System Lands ervice Office).	, the	 Operator certifie Such other site BLM. 		formation and/or plans as m	ay be required by the	
25. Signature	7/h			(Printed/Typed) s Hahn		-	ate D7/17/2012	
Title Land Regula	tory Agent					<u></u> I.		
Approved by (Signatu			Name	(Printed/Typed)		j S	Date JAN 2 9 2013	
Title	STATE DIREC	UR	Office		NM	I STATE OFFI	CBÌ	
conduct operations the	l does not warrant or certify that nereon.	the applicant holds lega	l lorequit	able title to those righ		•		
	val, if any, are attached.					BUNAL FOR T		
Fitle 18 U.S.C. Section States any false, fictit	n 1001 and Title 43 U.S.C. Section ious or fraudulent statements or	1212, make it a crime f representations as to any	or any pe matter w	rson knowingly and ithin its jurisdiction.	willfully to 1	nake to any department or	agency of the United	
(Continued on	page 2)					*(Instru	ctions on page 2)	

Capitan Controlled Water Basin

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Approval Subject to General Requirements & Special Stipulations Attached

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SÉÉ ATTACHED FOR CONDITIONS OF APPROVAL

YATES PETROLEUM CORPORATION Lusk AIB Federal #10H 150' FNL & 660' FWL Surface Hole Location 330' FSL and 660' FWL Bottom Hole Location Section, 35-T19S-R32-E Lea County, New Mexico

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

Rustler Top of Salt	1071' 1156'	Avalon Sand Middle Avalon	7861' Oil Pay 8182'
Base of Salt	2681'	Lower Avalon	8516'
Yates	2901' Oil Pay	1 st Bone Spring Sand	8751' Oil Pay
Capitan Reef	3211'	2 nd Bone Spring Sand	9371' Oil Pay
Bell Canyon	4701' Oil Pay	2 nd Bone Spring Target	9706' Oil Pay
Cherry Canyon	4986' Oil Pay	Base 2 ^{nª} B.S. Šand ⊂	9811 Oil Pay
Brushy Canyon Bone Spring Lime	6181' Oil Pay 7666' Oil Pay	TD	14278' Oil Pay

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

Water:	Approx 250' - 350'
Oil or Gas:	All Potential Zones

3. Pressure Control Equipment: Pressure Control Equipment: Yates Petroleum Corporation hereby request a variance to allow us to place a 2000 PSI annular system with a 21 1/4" opening will be installed on the 20" a 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375" casing and 5000 PSI BOPE will be installed on the 9.625" casing. Pressure tests to 1000 PSI, 3000 PSI and 5000 PSI respectively and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventer controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventers 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. See Con-Low pressure test

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	e <u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	Coupling	Interval	Length	<u>1</u>
26"	20"	106.5#	J-55	ST&C	0-80'	80'	
26"	20"	94#	J-55	ST&C	80-900'	_' 820'	
26"	20"	106.5#	J-55	ST&C	900'-1400'14	^{\$} 200'	
17 1/2"	13 3/8"	61#	HCK-55	ST&C	0-80'	80'	5
17 1/2"	13 3/8"	54.50#	J-55	ST&C	80'-1800'	1720'	~
17 1/2"	13 3/8"	61#	HCK-55	ST&C	1800'-2850'	1050'	
12 1/4"	9 5/8"	40#	HCK-55	LT&C	0-80'	80'	
12 1/4"	9 5/8"	36#	K-55	LT&C	80'-3500'	3420'	
12 1/4"	9 5/8"	40#	HCK-55	LT&C	3500'-4800'	1300'	
8 3/4"	5 1/2"	17#	P-110	LT&C	0-9220'	9220'	
8 1/2"	5 ½"	17#	P-110 Buttresss	LT&C	9220'-14278	3' 5058'	
	Minimum Casing	Design Fa	ctors: Collapse 1.′	125, Burst 1	.0, Joint Stre	ength 1.8	

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Lusk AHB Federal #10H Page 2

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Pilot hole will be drilled to 10000'. A 200' isolation plug will be placed from 10000' to 9800' cemented with 100 sacks of Class 'H' (Wt 17.5 Yld 0.94) excess of 10%. Additives being fresh water 3.352 gal/sk, Dispersant 0.30 gal/sk, Retarder Acc 0.070 gal/sk, Antifoam 0.020 gal/sk. A 600' kick off plug will be placed from approx. 9500' to 8900' and cemented with 360 sacks of Class 'H' (Wt 17.5 Yld 0.94) excess 35%. Additives being fresh water 3.352 gal/sk, Dispersant 0.30 gal/sk, Retarder Acc 0.060 gal/sk, Antifoam 0.020 gal/sk. Well will then be kicked off at 9229' and directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 9979' MD (9706 TVD). Hole will then be reduced to 8 ½" and drilled to 14278' MD (9706 TVD) where 5 ½ "casing will be set and cemented. A DV tool will be set at approx.7000'. Penetration point of the producing zone will be encountered at 627' FNL and 663' FWL of Section 35, T19S-R32E. Deepest TVD in the Pilot hole will be 10000'.

B. CEMENTING PROGRAM:

Surface casing: 1520 sx 35:65:6 PzC (Wt.12.50 Yld 2.0) Tail in w/200 sx "C" +2% CaCl2 (Wt 14.80 Yld 1.34). 100% excess. TOC-Surface.

Intermediate Casing I: (0-2850') 1840 sx 35:65:6 PzC (Wt 12..50 Yld 2.00); Tail in w/200 sx "C" +2% CaCl2 (Wt 14.80 Yld 1.34). 100% excess. TOC Surface.

Intermediate Casing 2

Stage 2: (0-3150') Lead with 845 sx 35:65:6PzC (Wt 12.50 Yld 2.00). Tail in with 200 sx Class 'C' +2% CaCl2 (Wt 14.80 Yld 1.34). 100% excess. TOC Surface.

Stage 1: (3150'-4800')

Lead in with 375 sx 35:65;6PzC (Wt 12.50 Yld 2.00). Tail in w/200 sx Class 'C' + 2% CaCl2 (Wt 14.80 Yld1.34). 100% excess. TOC 3150'.

Production Casing will be cemented using a DV Tool at 7000'.

Stage 2: (3800'-7000')

Lead with 545 sx 35:65:6PzC (Wt 12.50 Yld 2.00). Tail in with 200 sx PecosVILt (Wt 13.00 Yld 1.41). With additives iincluding 30% CaCO2, 3.2% Expansion Additive, 2% Antifoam, .8% Retarder, 15% Fluid Loss. 35% excess. TOC 3800'.

Stage 1: (7000'-14278')

Lead with 495 sx 35:65:6PzC (Wt 12.50 Yld 2.00). Tail in with 1060 sx of Pecos VLt (Wt 13.00 Yld 1.41) With additives including 30% CaCO2, 3.2% Expansion Additive, 2% Antifoam, .8% Retarder, 15% Fluid Loss. 35% excess. TOC 7000'.

5. Mud Program and Auxiliary Equipment:

Secop	<u>interval</u> 0-1100 [°] ۱۱ ⁴⁵	Type	<u>Weight</u>	<u>Viscosity</u>	Fluid Loss
-	0-1,00 1	Fresh Water	8.6-9.2	32-34	N/C
	J100'-2850'	Brine	10.00	28-29	N/C
	2850'-4800'	Fresh Water	8.6-9.2	28-32	N/C
	4800'-10000'	Cut Brine	8.8-9.2	30-34	N/C
	9229'-14278'	Cut Brine	8.8-9.2	30-34	<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:

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Samples: Logging:	30 samples to 4800'. 10' samples 4800' to TD. GR Neutron 30 degrees dev to surface.
	Density 30 degrees dev to intermediate casing. Laterlog 30 degrees dev to intermediate casing.
	CMR 30 degrees dev to intermediate casing.
	Schlumberger Tools Platform /HRLA/CMR
Coring:	None.
DST's:	None.

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

/ Indoporto a Din i					
0	TO:	1100'	Anticipated Max. BHP:	526	PSI
1100'	TO:	2850'	Anticipated Max. BHP:	1512	PSI
2850'	TO:	4800'	Anticipated Max. BHP:	2296	PSI
4800'	TO:	9706'	Anticipated Max. BHP:	4643	PSI
	0 1100' 2850'	0 TO: 1100' TO: 2850' TO:	0 TO: 1100' 1100' TO: 2850' 2850' TO: 4800'	0 TO: 1100' Anticipated Max. BHP: 1100' TO: 2850' Anticipated Max. BHP: 2850' TO: 4800' Anticipated Max. BHP:	0 TO: 1100' Anticipated Max. BHP: 526 1100' TO: 2850' Anticipated Max. BHP: 1512 2850' TO: 4800' Anticipated Max. BHP: 2296

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





			Spin K.	Survey/Plann	ing Report	ter i ar stra		$R_{\rm ext} \sim 2$	Sections:
Operator Yates Petroleum Corp.			Northing			n. 1 P. 20040-00	3-Jul-12		
Dir. Co. Yates Petroleum Corp.			Easting			The part of the second second second second second	2 - St. Plane		
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	Sec. 35, 19	9S-32E		Latitude			二十五十四 二十二 二十二 二十二十二 二十二十二 二十二 二十二 二十二 二十二 二	4302 - Utah	Central
Rig				Longitude			Scale Fac.		
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Yates Petroleum Corporation





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Typical low Pressure System Schematic Annular Preventer 2,000 psi



Typical 2,000 psi choke manifold assembly with at least these minimun features





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



YATES PETROLEUM CORPORATION

Piping from Choke Manifold to the Closed Loop Drilling Mud System



The flare discharge must be 100' from wellhead for non H2S wells and 150' from wellhead for wells expected to encounter H2S.

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YATES PETROLEUM CORPORATION Lusk AHB Federal #10H 150' FNL and 660' FWL SHL 330' FSL and 660' FWL BHL Section 35, T19S-R32E Exhibit D Lea County, New Mexico

Yates Petroleum Corporation Location Layout for Permian Basin

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Closed Loop Design Plan

