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14-152

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

R-111-POTASH

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NM-121957

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Capella BOP Federal #5H (37845)

2. Name of Operator Yates Petroleum Corporation (25575)

9. API Well No.
30-025-42703

3a. Address 105 S. Fourth St.
Artesia, NM 88210

3b. Phone No. *(include area code)*
575-748-4120

10. Field and Pool, or Exploratory
Lost Tank; Delaware (40299)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 420' FSL & 110' FWL SHL (M)
At proposed prod. zone 330' FNL & 1980' FWL BHL (C) Non-Standard Location

11. Sec., T. R. M. or Blk. and Survey or Area
Section 9, T21S-R32E

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

12. County or Parish
LEA → Eddy County

13. State
NM

15. 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	17. Spacing Unit dedicated to this well
420' FSL SHL 330' FNL BHL	1280	E2W2 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
250'	8466' TVD 13194' TD	NMB000434 NMB000920
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3707'	11/07/2014	40 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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 BLM.

25. Signature	Name *(Printed/Typed)*	Date
Travis Hahn	Travis Hahn	11/06/2013

Title
Land Regulatory Agent

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Stephen J Caffey		6/8/15
Title For 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.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

KZ 07/22/15 PW

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

JUL 23 2015

YATES PETROLEUM CORPORATION
Capella BOP Federal #5H
420' FSL & 110' FWL SHL
330' FNL & 1980' FWL BHL
Sec. 9 T21S-R32E
Lea County, New Mexico

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

Rustler	1035'
Top of Salt	1190'
Base of Salt	4490'
Lamar Lime	4815'
Bell Canyon	4909' Oil
Cherry Canyon	5545' Oil
Brushy Canyon	7291' Oil
Brushy Horizontal TRGT	9252' Oil
Lateral Hole (TD)	13395' Oil

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

Water: Approx.: 0' - 1035'
Oil or Gas: See above--All Potential Zones

3. Pressure Control Equipment: 3000 PSI BOPE with a 13.625" opening will be installed on the 13.375" casing and also on the 9.625" casing. Pressure tests to 3000 PSI and held for 30 minutes will be conducted before drilling out from under all casing strings, which are set and cemented in place. Test will be conducted by an Independent Tester, utilizing a test plug in the well head. Test will be held for 10 minutes on each segment of the system tested. Any leaks will be repaired at the time of test. Annular preventer will be tested to 50% of rated working pressure. Accumulator system will be inspected for correct pre charge pressures, and proper functionality, prior to connection to the BOP system. 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 COA

4. 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.

5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program: (All New) 13 3/8" will be J-55/H-40 Hybird

* See COA

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
26"	20"	94#	H-40		0-65'	65'
17.5"	13.375"	48#	J-55	ST&C	0-~~1060'~~	1060'
12.25"	9.625"	40#	J-55	LT&C	0'-80'	80'
12.25"	9.625"	36#	J-55	LT&C	80'-3100'	3020'
12.25"	9.625"	40#	J-55	LT&C	3100'-4200'	1100'
12.25"	9.625"	40#	HCK-55	LT&C	4200'-~~4960'~~	760'
8.75"	5.5"	17#	P-110	Buttress Thread	0'-9252'	9252'
8.5"	5.5"	17#	P-110	Buttress Thread	9252'-13359'	4107'

See COA

Minimum Casing Design Factors: Burst 1.0, Tensile 2.8, Collapse 1.125

B. CEMENTING PROGRAM:

Surface casing (0' – 1060'): Lead with 590 sacks of Class PozC 35:65:6 + 2% CaCl2 (WT 12.50, YLD 2.0, H2O 11.0 gal/sack); tail in with 215 sacks of Class C + 2% CaCl2 (WT14.80, YLD 1.34, H2O 6.2 gal/sack). Designed with 100% excess, TOC is surface.

Intermediate Casing (0' – 4960'): Lead with 1410 sacks of Class PozC 35:65:6 + 2% CaCl2 (WT 12.5, YLD 2.0, H2O 11.0 gal/sack); tail in with 215 sacks of Class C + 2% CaCl2 (WT 14.8, YLD 1.34, H2O 6.2 gal/sack). Designed with 100% excess, TOC is surface.

Production Casing: Cement to be done with DV Tool in three stages at approximately 4500' and 7500'.

Stage 1 from 8000' – 13359': Cement with 935 sacks of Pecos Valley Lite (WT 13.0, YLD 1.82, H2O 9.3 gal/sack) 30% CaCO, 3.2% Expansion additive, 2% Antifoam, 0.8% Retarder, 15 Fluid loss. TOC- 7500' designed with 35% excess.

Stage 2 from 5000' – 8000': Lead cement with 375 sacks of Class PozC 35:65:6 + 2% CaCl2 (WT. 12.5, YLD 2.0, H2O 11.0 gal/sack); tail in with 205 sacks of Class C + 2% CaCl2 (WT 14.8, YLD 1.34, H2O 6.2 gal/sack). TOC is 4500', designed with 35% excess.

Stage 3 from 0' – 5000': Lead cement with 715 sacks of Class PozC 35:65:6 + 2% CaCl2 (WT. 12.5, YLD 2.0, H2O 11.0 gal/sack); tail in with 205 sacks of Class C + 2% CaCl2 (WT 14.8, YLD 1.34, H2O 6.2 gal/sack). TOC is surface, designed with 35% excess.

Intermediate casing will be set at approximately 4960' MD (~~4907~~' TVD). See COA
Hole will be drilled on a tangent from 2900' to 8536' MD (8354' TVD) and kicked off at approximately 8536' MD (8354' TVD). Well will then be drilled directionally at 12 degrees per 100' with an 8.75" hole to 9252' MD (8605' TVD). Hole will then be reduced to 8.5" and drilled to TD at 13359' MD (8605' TVD) where 5.5" casing will be set and cemented to the surface. Production casing will be cemented in three stages with a DV Tool placed at approximately 4500' and 7500'. Penetration point of producing zone will be encountered at 540' FSL & 1650' FWL, Section 9-21S-32E. Deepest TVD in the lateral will be 8605'.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

See COA

Interval	Type	Weight	Viscosity	Fluid Loss
0-~~1065'~~	Fresh Water	8.6-9.2	32-34	N/C
~~1065'-4600'~~	Brine Water	10.0-10.2	28-28	N/C
~~4600'~~-16552'	Cut Brine	8.8-9.0	28-28	N/C

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. Mud level monitoring: After surface casing is set, an electronic PVT system will be installed as our primary mud level monitoring system. A secondary system will also be implemented as to insure the PVT system is functioning properly. The secondary system will be comprised of the derrick hand checking the fluid level in the pits periodically using a nut on the end of a rope hanging just above the fluid level in the pit.

7. EVALUATION PROGRAM:

See COA

Samples: 30' samples to 2000'. 10' samples 2000' to TD.
Logging: CNL/LDT/NGT Curve – Intermediate casing
CNL/GR Curve – Surface
DLL-MSFL – Curve – Intermediate casing
CMR Curve – Intermediate casing
Horizontal-MWD-GR Horizontal
Coring: None
DST's: None
Mudlogging: From 2500' to TD (13194').

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE & POTENTIAL HAZARDS:

Anticipated BHP:

From:	0'	TO:	1220'	Anticipated Max. BHP:	584	PSI
From:	1220'	TO:	4900'	Anticipated Max. BHP:	2599	PSI
From:	4900'	TO:	8497"	Anticipated Max. BHP:	3977	PSI

No abnormal pressures or temperatures are anticipated
H2S is not Anticipated

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 65 days to drill the well with completion taking another 30 days.