

ATS-10-802

Form 3160-3  
(February 2005)

OCD Artesia

FORM APPROVED  
OMB NO. 1004-0137  
Expires: March 31, 2007

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.  
NM-82902 & NM-124660

6. If Indian, Allottee or Tribe Name  
N/A

7. If Unit or CA Agreement, Name and No.  
N/A

8. Lease Name and Well No. (22903)  
Domino "AOJ" Federal Com. #12H

9. API Well No.  
30-015-38386

10. Field and Pool, or Exploratory  
HACKBERRY'S (9705)  
Wildcat Bone Spring NORTH

11. Sec., T., R., M., or Blk. And Survey or Area  
Sec. 8-19S-31E

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator  
Yates Petroleum Corporation (025575)

3a. Address  
105 South Fourth Street, Artesia, NM 88210

3b. Phone No. (include area code)  
505-748-1471

4. Location of well (Report location clearly and in accordance with any State requirements. \*)  
At surface  
660' FNL & 330' FWL, NWSW, Section 8-T19S-31E (D)  
At proposed prod. zone  
660' FNL & 330' FEL, NWSW, Section 8-T19S-R31E

14. Distance in miles and direction from the nearest town or post office\*  
Approximately 6 miles south of Loco Hills, NM

12. County or Parish  
Eddy

13. State  
NM

15. Distance from proposed\* location to nearest  
(Also to nearest drlg. unit line, if any) 330'

16. No. of acres in lease  
920 BH&40 SH

17. Spacing Unit dedicated to this well  
N2N2-Sec.8-19S-31E

18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth  
8800 TVD  
7980 VD & 13215 MD

20. BLM/ BIA Bond No. on file  
NATIONWIDE BOND #NMB000434

21. Elevations (Show whether DF, KDB, RT, GL, etc.)  
3505 GL

22. Approximate date work will start\*  
ASAP

23. Estimated duration  
60 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. ap
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 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

RECEIVED  
DEC 29 2010  
NMOOD ARTESIA

25. Signature *Clifton May* Name (Printed/ Typed) Clifton May Date 11/4/2010

Title Land Regulatory Agent

Approved By (Signature) /s/ Don Peterson Name (Printed/ Typed) Date DEC 23 2010

Title 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 wilfully 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 page 2)

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Witness Surface &  
Intermediate Casing

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

# YATES PETROLEUM CORPORATION

Domino AOJ Federal Com. #12H  
660' FNL & 330' FWL, Surface Hole  
660' FNL & 330' FEL, Bottom Hole  
Section 8 -T19S-R31-E  
Eddy County, New Mexico

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

Rustler	490'	1st Bone Spring	7860' Oil Pay	
Tansill	1950' Oil Pay	2 <sup>nd</sup> Bone Spring	8580' Oil Pay	8594'-MD
Yates	2090' Oil Pay	TD (Lateral Hole)	8800'	13215'-MD
Seven Rivers	2420' Oil Pay			
Queen	3190' Oil Pay			
Capitan	3790' Oil Pay			
Cherry Canyon	4120' Oil Pay			
Brushy Canyon	4970' Oil Pay			
Bone Spring	6450' 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: A 13 5/8" BOP will be installed on the 13 3/8" and a 12 1/4" BOP will be installed on the 9 5/8" casing and both rated for 3000# BOP system 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.

## 1. THE PROPOSED CASING AND CEMENTING PROGRAM:

### A. Casing Program: (All New)

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
17 1/2"	13 3/8"	48#	J-55	ST&C	0-550'	550'
12 1/4"	9 5/8"	36#	J-55	LT&C	0-3300'	3300'
8 3/4"	5 1/2"	17#	HCP-110	LT&C	0-13215'	13215'

See Corr

Minimum Casing Design Factors: Burst 1.0, Tensile 1.8, Collapse 1.125

B. CEMENTING PROGRAM:

Surface casing: 250 sacks C Lite w/CaCl<sub>2</sub> (YLD 2.00 WT.12.50) tail in with 200 sacks Class C w/cacI<sub>2</sub> (YLD1.3WT 14.8). TOC-Surface.

Intermediate Casing: 910 sacks C Lite w/CaCl<sub>2</sub> (YLD 2.00 WT 12.50); tail in with 200 sacks Class C w/CaCl<sub>2</sub> (YLD 1.34 WT. 14.80) TOC-Surface

Production Casing: Cement to be done in two stages with stage tool at approx. 4300'.

Stage 1 from 4300'-13215'; cement with 2100 sacks Pecos Valley Lite w/22.5 lb/sack Calcium Carbonate, 1.5 lb/sack Extender, 0.01 lb/sack Retarder, 0.6 lb sack Retarder, and 0.15 lb/sack Antiform Agent (YLD 1.83 WT. 13.00). TOC-4300

Stage 2 from 2800'-4300'; cement with 375 sacks C Neat (YLD 1.72 WT 13.50).

Tail In with 100 sacks Class C (YLD 1.32 WT 14.8). TOC- 2800'.

Well will be drilled vertically to 8323'. Well will be kicked off at approximately 8323' and directionally drilled at 12 degrees per 100' with an 8 3/4" hole to 9100' MD (8800' TVD).

If hole conditions dictate, 7" casing will be run and cemented. Hole will then be reduced to 6 1/8" and drilled to 13215' MD (8800' TVD) where 4 1/2" casing will be set and cemented.

If 7" is not ran, then hole will be reduced to 7 7/8" and drilled to 13215 MD (8800' TVD where 5 1/2" casing will be set and cemented. Penetration point of producing zone will be encountered at 660' FNL & 807" FWL, Section 8-18S-31E. Deepest TVD is 8800' in the lateral.

5. Mud Program and Auxiliary Equipment:

Interval	Type	Weight	Viscosity	Fluid Loss
0-550' <i>575</i>	Fresh Water	8.6-9.2	35-40	N/C
550'-3300'	Brine Water	10.0-10.2	28	N/C
3300'-8323'	Cut Brine	8.7-9.2	28-29	N/C
8323'-13215'	Cut Brine (lateral)	8.0-9.0	28-32	<10-12

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:

*see COA*

Samples: 10 samples out from under surface casing.  
Logging: Platform Express/Hals/Sonic,CMR.  
Coring: As warranted.  
DST's: As warranted.

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

Anticipated BHP:

From: 0	TO: 550'	Anticipated Max. BHP:	263 PSI
From: 550'	TO: 3300'	Anticipated Max. BHP:	1750 PSI
From: 3300'	TO: 8820	Anticipated Max. BHP:	4188 PSI

## Domino AOJ Federal #12H

### Contingency Casing Design

If hole conditions dictate, 7" casing will be set at 9,100' MD (8,800' TVD). A 6 1/8" hole will then be drilled to 13,215' MD (8,800' TVD) where 4 1/2" casing will be set and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 8200'.

#### 2nd Intermediate

0 ft to 800 ft		Make up Torque ft-lbs		Total ft =
O.D.	Weight	Grade	Threads opt. min. mx.	
7 inches	26 #/ft	J-55	LT&C	3670 2750 4590
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
4,320 psi	4,980 psi	367,000 #	415,000 #	6.151

800 ft to 5,700 ft		Make up Torque ft-lbs		Total ft =
O.D.	Weight	Grade	Threads opt. min. mx.	
7 inches	23 #/ft	J-55	LT&C	3130 2350 3910
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
3,270 psi	4,360 psi	313,000 #	366,000 #	6.25

5,700 ft to 8,000 ft		Make up Torque ft-lbs		Total ft =
O.D.	Weight	Grade	Threads opt. min. mx.	
7 inches	26 #/ft	J-55	LT&C	3670 2750 4590
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
4,320 psi	4,980 psi	367,000 #	415,000 #	6.151

8,000 ft to 9,100 ft		Make up Torque ft-lbs		Total ft =
O.D.	Weight	Grade	Threads opt. min. mx.	
7 inches	26 #/ft	L-80	LT&C	5110 3830 6390
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
5,410 psi	7,240 psi	511,000 #	604,000 #	6.151

DV tool placed at 4300'.

Stage I: Cemented w/1025sx PVL (YLD 1.41 Wt 13) TOC= 4300'

Stage II: Lead w/625sx Lite Crete (YLD 2.78 Wt 9.9), tail w/125sx PVL (YLD 1.41 Wt 13) TOC= 2800'

#### Production

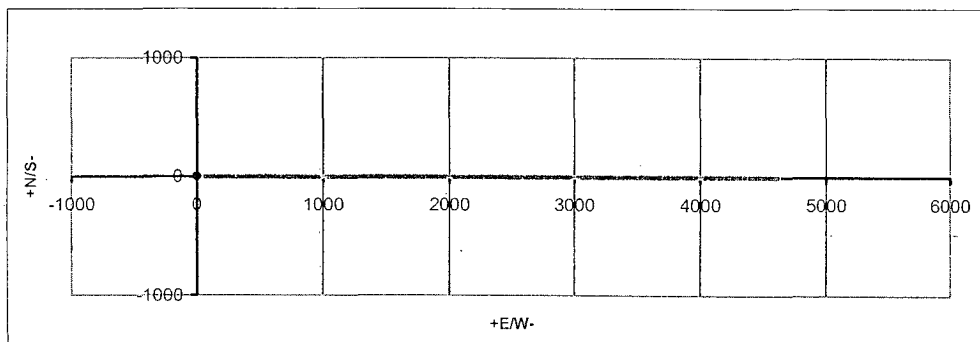
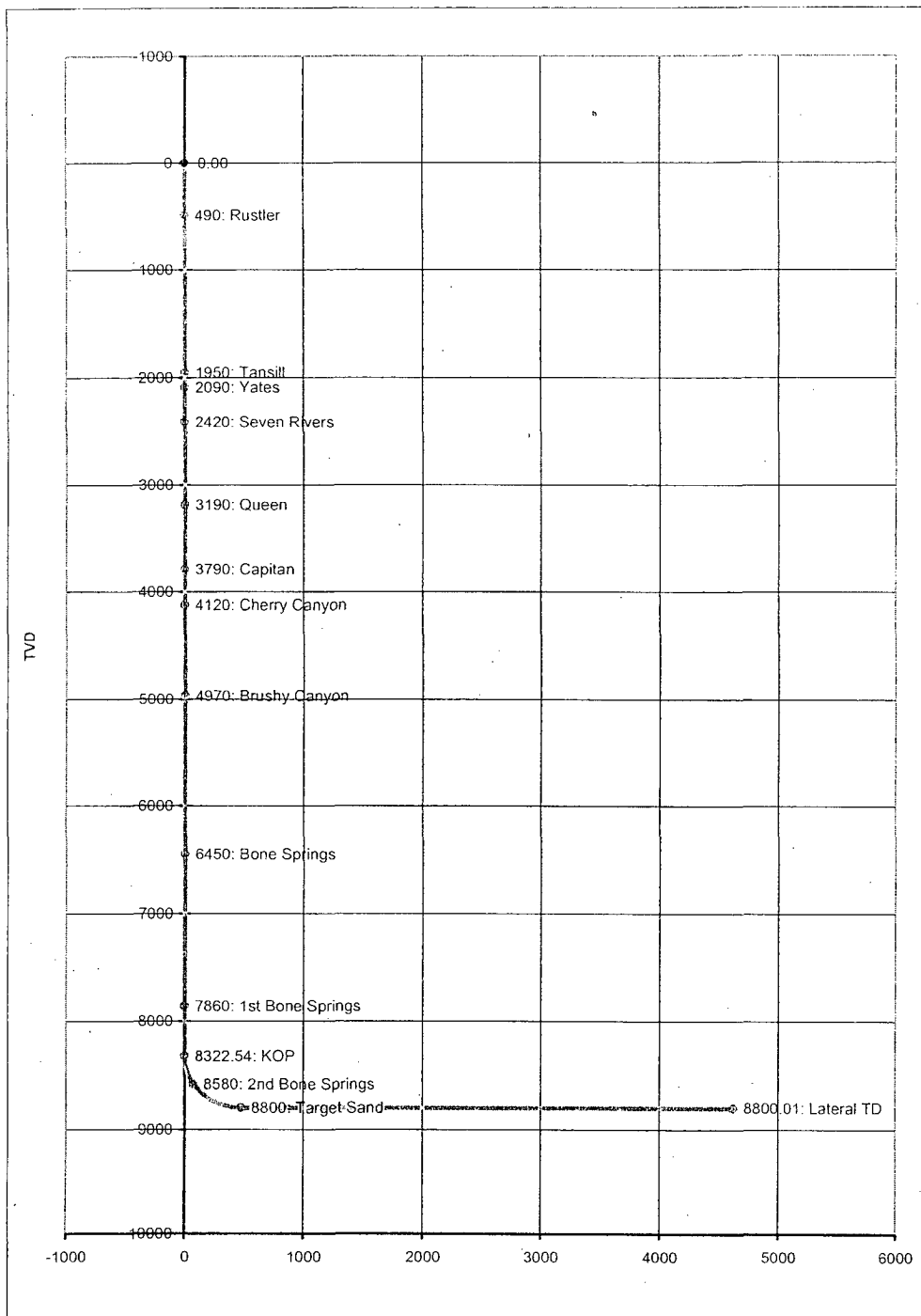
0 ft to 13,215 ft		Make up Torque ft-lbs		Total ft =
O.D.	Weight	Grade	Threads opt. min. mx.	
4.5 inches	11.6 #/ft	HCP-110	LT&C	3020 2270 3780
Collapse Resistance	Internal Yield	Joint Strength	Body Yield	Drift
8,650 psi	10,690 psi	279,000 #	367,000 #	3.875

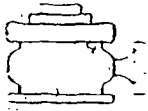
DV tool placed at approx. 8200' and cemented with one stage up to dv tool. After completion procedures, the 4 1/2" casing will be cut and pulled at 8200'.

Cemented w/525sx PVL (YLD 1.83 Wt 13) TOC= 8200'

Co: Yates Petroleum Corporation	Units: Feet, °, %/100ft	VS Az: 90.00	Tgt TVD: 8800.00
Drillers: 0	Elevation:	Tgt Radius: 0.00	Tgt MD: 0.00
Well Name: Domino AOJ Federal #12H	Northing:	Tgt N/S: 0.00	Tgt Displ.: 0.00
Location: Sect. 9, 19S-31E	Easting:	Tgt E/W: 4620.00	Method: Minimum Curvature

No.	MD	CL	Inc	Azi	TVD	VS	N/S	E/W	BR	WR	DLS	Comments
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
1	490.00	490.00	0.00	0.00	490.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Rustler
2	1950.00	1460.00	0.00	0.00	1950.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Tansill
3	2090.00	140.00	0.00	0.00	2090.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Yates
4	2420.00	330.00	0.00	0.00	2420.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Seven Rivers
5	3190.00	770.00	0.00	0.00	3190.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Queen
6	3790.00	600.00	0.00	0.00	3790.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Capitan
7	4120.00	330.00	0.00	0.00	4120.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Cherry Canyon
8	4970.00	850.00	0.00	0.00	4970.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 Brushy Canyon
9	6450.00	1480.00	0.00	0.00	6450.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 Bone Springs
10	7860.00	1410.00	0.00	0.00	7860.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00 1st Bone Springs
11	8322.54	8322.54	0.00	90.00	8322.54	0.00	0.01	0.00	0.00	1.08	0.00	0.00 KOP
12	8400.00	77.46	9.30	90.00	8399.66	6.27	0.01	6.27	12.00	0.00	12.00	
13	8500.00	100.00	21.30	90.00	8495.94	32.60	0.01	32.60	12.00	0.00	12.00	
14	8594.46	271.93	32.63	90.00	8580.00	75.36	0.01	75.36	12.00	0.00	12.00	2nd Bone Springs
15	8600.00	5.54	33.30	90.00	8584.65	78.38	0.01	78.38	12.01	0.00	12.01	
16	8700.00	100.00	45.30	90.00	8661.89	141.59	0.01	141.59	12.00	0.00	12.00	
17	8800.00	100.00	57.30	90.00	8724.31	219.49	0.01	219.49	12.00	0.00	12.00	
18	8900.00	100.00	69.30	90.00	8769.17	308.66	0.01	308.66	12.00	0.00	12.00	
19	9000.00	100.00	81.30	90.00	8794.50	405.21	0.01	405.21	12.00	0.00	12.00	
20	9072.53	750.00	90.00	90.00	8800.00	477.46	0.01	477.46	12.00	0.00	12.00	Target Sand
21	13215.07	4142.54	90.00	90.00	8800.01	4620.00	0.00	4620.00	0.00	0.00	0.00	Lateral TD



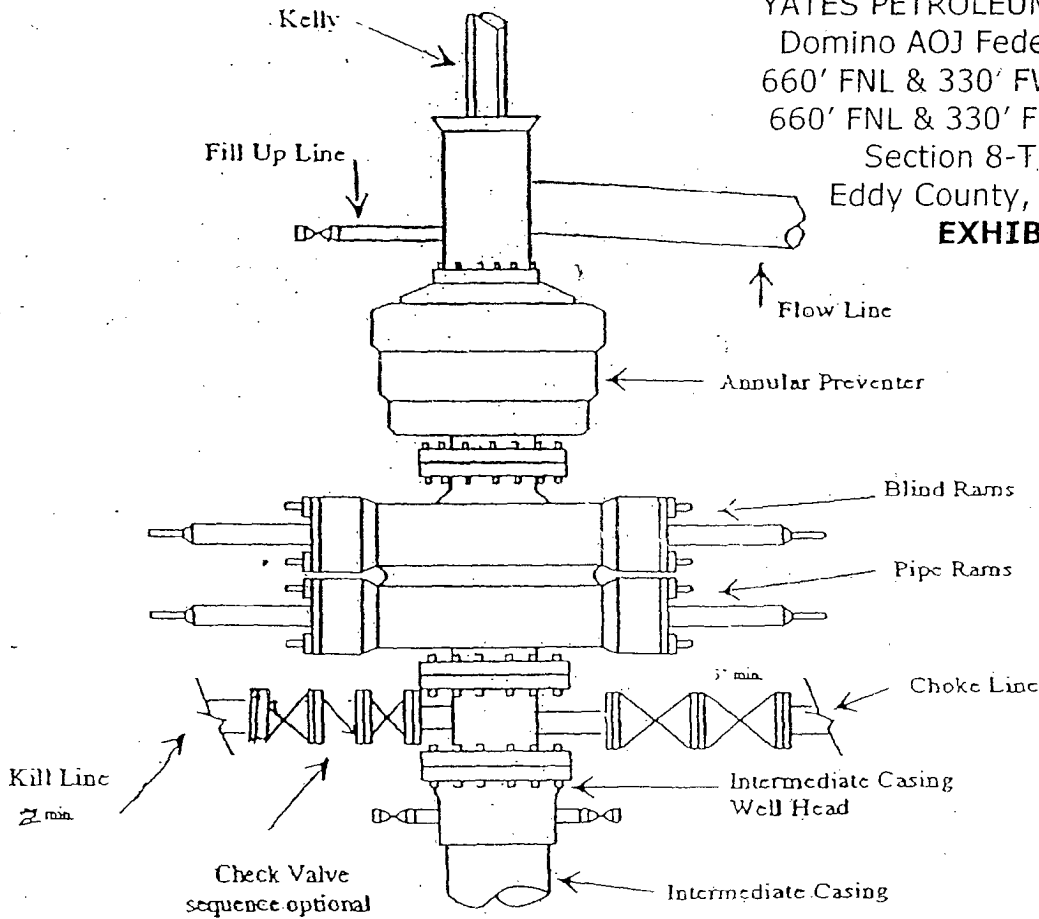


# Yates Petroleum Corporation

BOP-3

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

YATES PETROLEUM CORPORATION  
Domino AOJ Federal Com. #12H  
660' FNL & 330' FWL, Surface Hole  
660' FNL & 330' FEL, Bottom Hole  
Section 8-T19S-R31E  
Eddy County, New Mexico  
**EXHIBIT C**



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

