

ATS-10-766
EA-11-257

Split Estate

OCD-ARTESIA

Form 3160-3
(February 2005)

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

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0437523
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210		8. Lease Name and Well No. <input checked="" type="checkbox"/> Grateful "BOD" Federal Com. #2H
3b. Phone No. (include area code) 505-748-1471		9. API Well No. 30-015-38518-
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface 1650' FNL & 330' FEL, SENE, Section 13-T18S-29E		10. Field and Pool, or Exploratory SPLIT TAIL Bone Spring
At proposed prod. zone 1980' FNL & 330' FWL, SWNW, Section 13-T18S-R29E		11. Sec., T., R., M., or Blk. And Survey or Area Sec. 13-18S-29E
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
15. Distance from proposed* location to nearest (Also to nearest drlg. unit line, if any) 330'		13. State NM
16. No. of acres in lease 434.46	17. Spacing Unit dedicated to this well S2N2-Sec.13-18S-29E	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 7980 VD & 12407 MD	20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3494 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. | 4. Bond to cover the operations unless covered by existing bond on file (see item 20 above). |
| 2. ap | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM |

25. Signature <i>Clifton May</i>	Name (Printed/ Typed) Clifton May	Date 11/1/2010
Title Land Regulatory Agent		
Approved By (Signature) <i>/s/ Don Peterson</i>	Name (Printed/ Typed) Don Peterson	Date FEB - 9 2011
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 cc operations thereon.

Conditions of approval, if any, are attached.

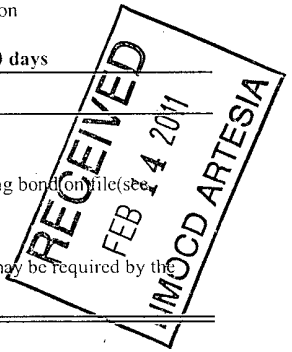
APPROVAL FOR TWO YEARS

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**

Roswell Controlled Water Basin
**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**



YATES PETROLEUM CORPORATION
 Grateful "BOD" Federal Com. #2 #2H
 1650' FNL and 330' FEL, Section 13-18S-29E, Surface Hole Location
 1980' FNL & 330' FWL, Section 13-18S-29E, Bottom Hole Location
 Eddy County, New Mexico

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

Rustler	320'	San Andres	3160'
Tansill	1170'	Bone Springs	4270' Oil
Yates	1270'	First Bone Springs	6950' Oil
Seven Rivers	1670'	2 nd Bone Springs	7570' Oil
Queen	2250' Oil/Gas	Target Sand (Lateral)	8252' Oil
Grayburg	2630'	TD (Lateral Hole)	12407'

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

Water: 160'

Oil or Gas: Zones: 2250' Oil/Gas, 4270' Oil, 6950' Oil, 7570' Oil & 8252' Oil.

3. Pressure Control Equipment: BOPE will be installed on the ^{11 3/4"}~~13 3/8"~~ and 8 5/8" casing and rated for 3000# BOP System. Pressure tests 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 B.
4. 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 casing to be used

Hole Size	Casing Size	Wt./Ft	Grade	Coupling	Interval	Length
14 3/4"	11 3/4"	42#	H-40	ST&C	0- 400' 375'	400' 375'
11"	8 5/8"	32#	J-55	ST&C	0-3300'	3300'
7 7/8"	5 1/2"	17#	P-110	LT&C	0-8300'	8300'
7 7/8"	5 1/2"	17#	L-80	LT&C	8300'-12407'	4107'

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

B. CEMENTING PROGRAM:

Surface Casing: Cement with 275 sacks Class C (Yld 1.34 Wt. 14.80). TOC surface.

Intermediate Casing: Lead with 700 sacks of C Lite (Yld 2.04 Wt 12.50). Tail in with 225 sacks Class C (YLD 1.34 WT 14.80 YLD). TOC surface

Production: Production cement to be done in two stages with stage tool at approximately 6700'.

Stage 1: 6700'-12407' cement with 1100 sacks Pecos Valley Lite (Yld. 1.83 Wt. 13.00) TOC 6700'.

Stage 2: 2800'-6700' lead with 600 sacks C Lite (Yld 2.00 Wt. 12.5), tail with 100 sacks Class C (Yld. 1.34 Wt 14.80). TOC 2800'.

Well will be drilled with a 7 7/8" hole to 7503'. The well will then be kicked off at approximately 7503' and directionally drilled at 12 degrees per 100' with a 7 7/8" hole to 8300' MD (7980 TVD), lateral will then be drilled to 12407' MD (7980' TVD) where 5 1/2' will be run and cemented. Penetration point of producing zone will be encountered at 1684' FNL and 806' FEL in Section 13-18S 29E. Deepest TVD in the well will be in the lateral at 7980' in the lateral.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0- 400 375'	Fresh Water Gel	8.60-9.20	35-40	N/C
375'-400'-3300'	Brine Water	10.00-10.20	28	N/C
3300'-7503'	Cut Brine	8.80-9.00	28-29	N/C
7503'-12407'	Cut Brine(Lateral)	8.80-9.30	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. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: 30' Samples to 5000'. 10' Samples from 5000' to TD.

Logging: Platform Express/Hals/CMR/Dipole Sonic

Coring: None anticipated

DST's: None Anticipated

Mudlogging: Yes. From Surface Casing

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

Maximum Anticipated BHP:

0'-400'	191 PSI
400'-3300'	1750 PSI
3300'-7980'	3859 PSI

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H2S Zones Anticipated: None Anticipated

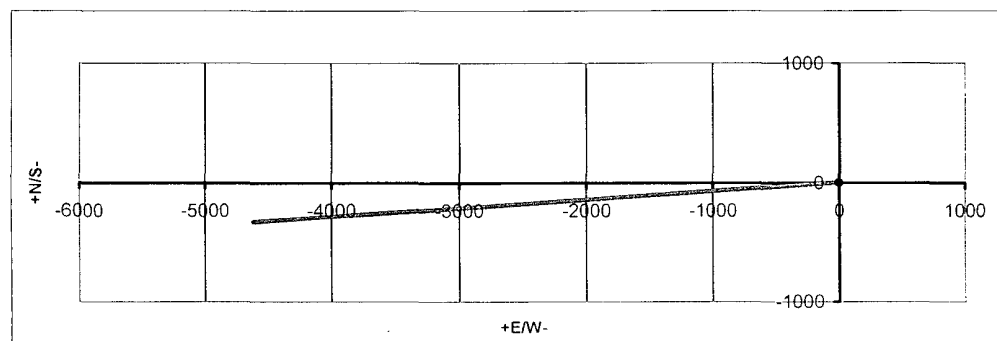
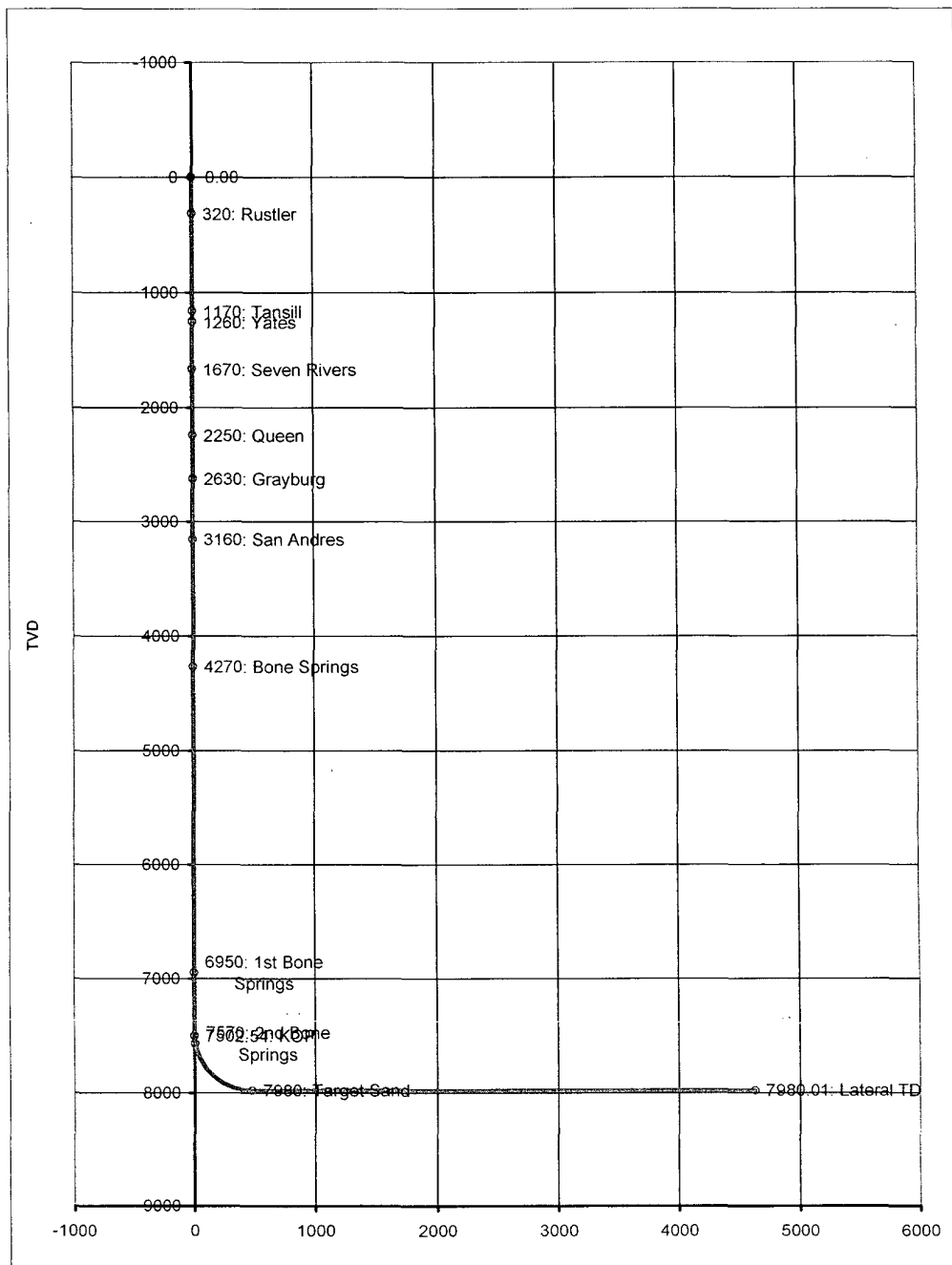
Maximum Bottom Hole Temperature: 155 F

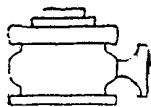
9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 60 days to drill the well with completion taking another 20 days.

Co: Yates Petroleum Corporation			Units: Feet, ° 7100ft		VS Az: 265.91		Tgt TVD: 7980.00	
Drillers: 0			Elevation:		Tgt Radius: 0.00		Tgt MD: 0.00	
Well Name: Grateful BOD Federal Com. #2H			Northing:		Tgt N/S: -330.00		Tgt Displ.: 0.00	
Location: Section 13, 18S-29E			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	320.00	320.00	0.00	360.00	320.00	0.00	0.00	0.00	0.00	0.00	0.00	Rustler
2	1170.00	850.00	0.00	360.00	1170.00	0.00	0.00	0.00	0.00	0.00	0.00	Tansill
3	1260.00	90.00	0.00	360.00	1260.00	0.00	0.00	0.00	0.00	0.00	0.00	Yates
4	1670.00	410.00	0.00	360.00	1670.00	0.00	0.00	0.00	0.00	0.00	0.00	Seven Rivers
5	2250.00	580.00	0.00	360.00	2250.00	0.00	0.00	0.00	0.00	0.00	0.00	Queen
6	2630.00	380.00	0.00	360.00	2630.00	0.00	0.00	0.00	0.00	0.00	0.00	Grayburg
7	3160.00	530.00	0.00	360.00	3160.00	0.00	0.00	0.00	0.00	0.00	0.00	San Andres
8	4270.00	1110.00	0.00	360.00	4270.00	0.00	0.00	0.00	0.00	0.00	0.00	Bone Springs
9	6950.00	2680.00	0.00	360.00	6950.00	0.00	0.01	0.00	0.00	0.00	0.00	1st Bone Springs
10	7502.54	7502.54	0.00	265.91	7502.54	0.00	0.01	0.00	0.00	3.54	0.00	KOP
11	7570.22	67.69	8.12	265.91	7570.00	4.79	-0.33	-4.78	12.00	0.00	12.00	2nd Bone Springs
12	7600.00	29.78	11.70	265.91	7599.32	9.91	-0.70	-9.89	12.00	0.00	12.00	
13	7700.00	100.00	23.70	265.91	7694.42	40.25	-2.86	-40.15	12.00	0.00	12.00	
14	7800.00	100.00	35.70	265.91	7781.13	89.70	-6.38	-89.48	12.00	0.00	12.00	
15	7900.00	100.00	47.70	265.91	7855.66	156.10	-11.11	-155.70	12.00	0.00	12.00	
16	8000.00	100.00	59.70	265.91	7914.76	236.54	-16.85	-235.94	12.00	0.00	12.00	
17	8100.00	100.00	71.70	265.91	7955.84	327.51	-23.33	-326.68	12.00	0.00	12.00	
18	8200.00	100.00	83.70	265.91	7977.11	425.04	-30.28	-423.96	12.00	0.00	12.00	
19	8252.53	750.00	90.00	265.91	7980.00	477.46	-34.01	-476.25	12.00	0.00	12.00	Target Sand
20	12406.84	4154.31	90.00	265.91	7980.01	4631.77	-329.99	-4620.00	0.00	0.00	0.00	Lateral TD

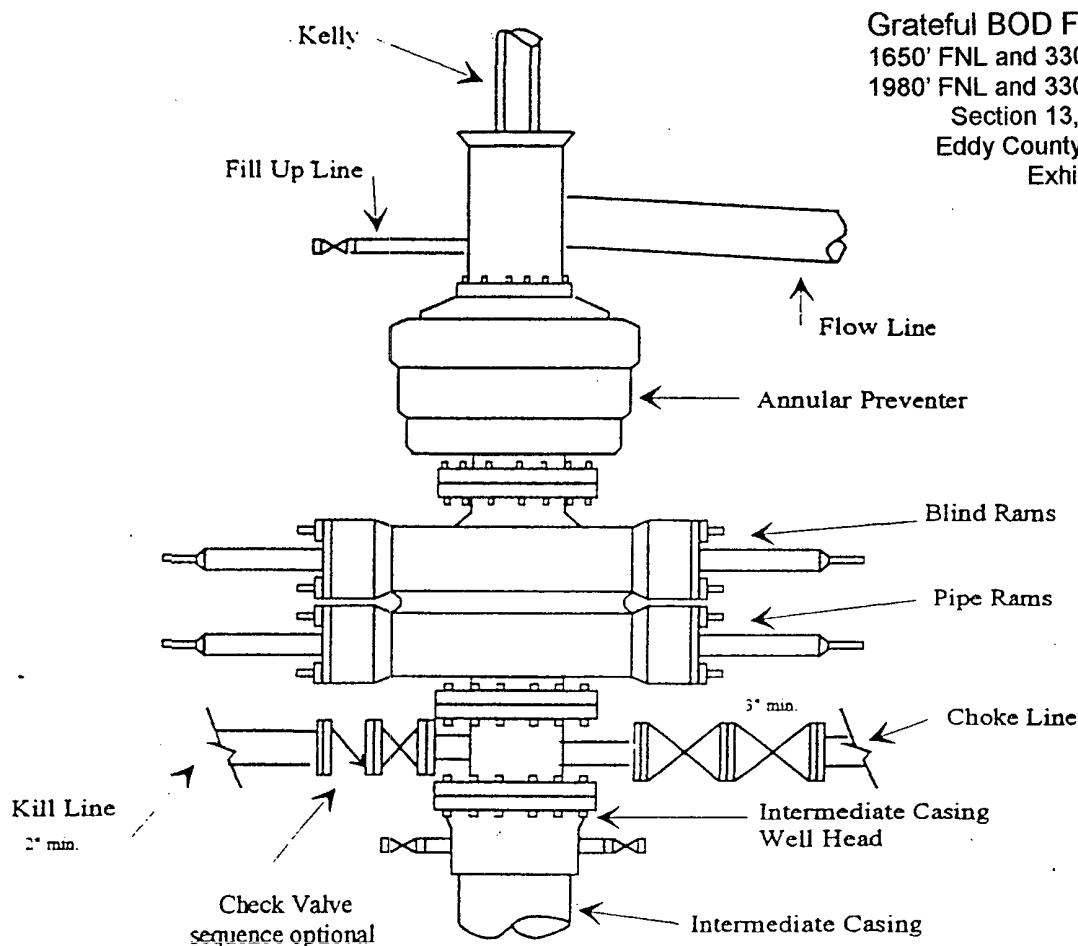




Yates Petroleum Corporation

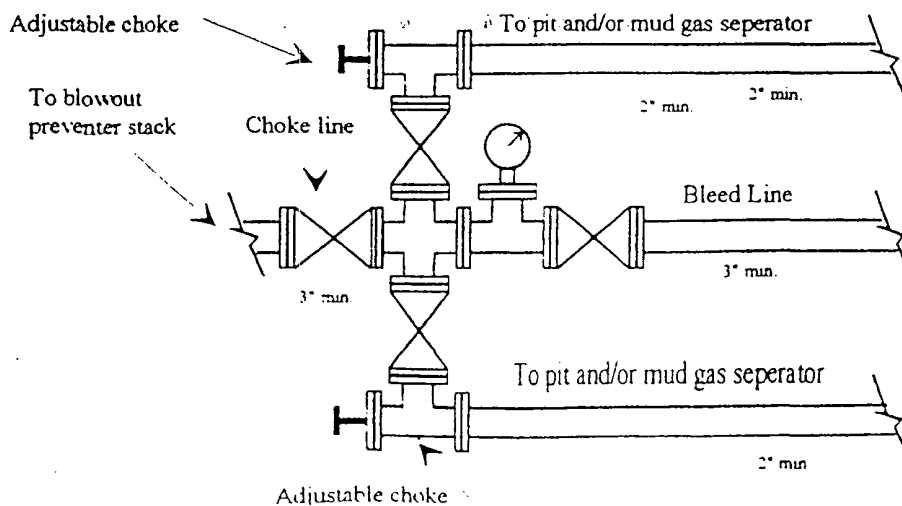
BOP-3

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



Grateful BOD Federal Com #2H
1650' FNL and 330' FEL Surface Hole
1980' FNL and 330' FWL Bottom Hole
Section 13, T18S-R29E
Eddy County, New Mexico
Exhibit "B"

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



YATES PETROLEUM CORPORATION
Piping from Choke Manifold
to the Closed-Loop Drilling Mud System

Grateful BOD Federal Com #2H
1650' FNL and 330' FEL Surface Hole
1980' FNL and 330' FWL Bottom Hole
Section 13, T18S-R29E
Eddy County, New Mexico
Exhibit "C-1"

