

RCVD FEB28'07

OIL CONS. DIV.

DIST. 3

Form 3160-3
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT 2006 OCT 5 AM 11:16FORM APPROVED
OMB NO. 1004-0137

Expires: March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SFO-44535B NMSF-044535B

6. If Indian, Allottee 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 Zone8. Lease Name and Well No.
Horn Canyon #2

2. Name of Operator

9. API Well No.

ROBERT L. BAYLESS, PRODUCER LLC

30-045-33990

3a. Address

3b. Phone No. (include area code)

P.O. BOX 168, FARMINGTON, NM 87499

(505) 326-2659

10. Field and Pool, or Exploratory
Basin Fruitland Coal

4. Location of Well (Report location clearly and in accordance with an State requirements *)

At surface

1335 FNL & 995 FEL

At proposed prod. zone

SAME

11. Sec., T., R., M., or Blk. and Survey or Area

H Section 15, T28N, R11W

14. Distance in Miles and Direction from nearest town or post office*

150 miles from Farmington

12. County or Parish

San Juan

13. State

New Mexico

15. Distance from proposed*

location to nearest
property or lease line, ft. 995 FT - LEASE LINE
(Also to nearest drig. unit line, if any)

16. No. of Acres in Lease

160

17. Spacing Unit dedicated to this well

320

18. Distance from proposed location*

to nearest well, drilling, completed,
or applied for, on this Lease, ft. 300 FT

19. Proposed Depth

1660

20. BLM/BIA Bond No. on file

40S23024BCA

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

5501 5506 RKB

22. Approximate date work will start*

ASAP

23. Estimated duration

8 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).

- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Name (Printed/Typed)

Date

Habib Guerrero

10-04-06

Title

Engineer

Approved by (Signature)

Name (Printed/Typed)

Title

Office

NOTIFY AZTEC OCD 24 hrs of cement
IN TIME TO WITNESS 2/28/07

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.

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.

*(Instructions on reverse) Filed at applicant's on NM OCD form C-103 prior to construction Location 2/28/07

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOCDB

3/8/07

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1210 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-33990		² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 33506	⁵ Property Name HORN CANYON		⁶ Well Number 2
⁷ OGRID No. 150182	⁸ Operator Name ROBERT L. BAYLESS, PRODUCER LLC		⁹ Elevation 5501

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	15	28N	11W		1335	North	995	East	San Juan

¹¹ Bottom Hole Location If Different From Surface

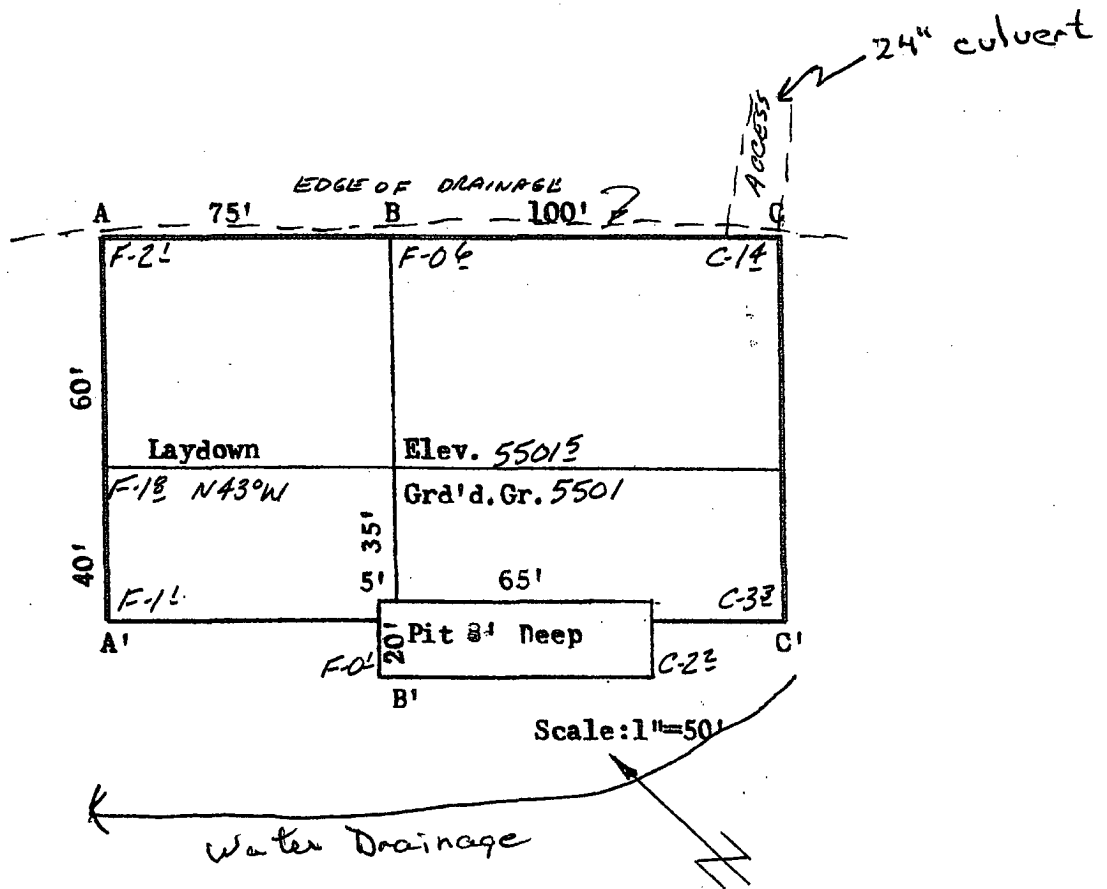
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>16 20. 589' 53" W</p> <p>WC + DU Fd</p> <p>80.18 CH.</p> <p>1335'</p> <p>995'</p> <p>80.00 CH.</p> <p>110° 01' W</p> <p>Sec. 15</p> <p>Lat. 36.66572° N Long. 107.92492° W</p>	<p>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Price M. Bayless</i> Signature Price M. Bayless Printed Name Engineering Manager Title Dec. 15, 2004 Date</p>
	<p>18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Dec 15 2004 Date of Survey Signature and Seal of Professional Surveyor 8466 Willis M. Matthe II Certificate Number 8466</p>

ROBERT L. BAYLESS, PRODUCER LLC
 HORN CANYON #2
 1335'FNL & 995'FEL
 Sec.15, T28N, R11W, NMPM
 San Juan Co., NM



A-A'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5510			
5500			
B-B'			
5510			
5500			
C-C'			
5510			
5500			

Robert L. Bayless, Producer LLC

Drilling Technical Program

(Attachment to Form 3160-3)

Horn Canyon #2
1335 FNL & 995 FEL (SENE)
Section 15, T28N, R11W
San Juan County, New Mexico

1. ESTIMATED FORMATION TOPS

<u>Formation</u>	<u>Depth KB</u>	<u>Est Pressure</u>
Ojo Alamo	395 feet	
Kirtland	535 feet	
Fruitland	1250 feet	350 psi
Pictured Cliffs	1555 feet	400 psi

2. WELL CONTROL SYSTEM

- A. The proposed blowout system (schematic drawings attached) is a bag type preventer, and will be used in 1000 psi service. The wellhead pressure is anticipated to be low and no gas flow to surface.
- B. Maximum anticipated bottom hole pressure = 400 psi. Well Control Anticipated Surface Pressure (ASP) = 400 psi.
- C. BOP pressure testing will be conducted at the time of installation and prior to drilling out surface casing shoe. The annular will be closed daily. A choke manifold will be installed as per attached drawing. Working pressure for the choke manifold is 2000 psi. In addition, a kill line from the mud pump will be installed.
- D. Stabbing valves for drill pipe and drill collars will be available on the rig floor. An upper kelly cock will also be available on the rig.
- E. Anticipated formation pressures average .25 psi/ft gradient and formation fracture pressures are anticipated to exceed the maximum mud weight of 9.1 pounds per gallon.

3. DRILLING MUD PROGRAM

- A. A 8 ¾" surface hole will be drilled with a fresh water system. Lime and gel will be added to provide viscosity as needed.
- B. A 6 ¼" hole will be drilled to total depth utilizing LSND mud.

Interval	Mud System	Weight PPG	Viscosity sec/qt	WL cc
0 – 120 ft	Spud mud	<9.0	35 – 55	NC
120 – 1660	LSND	8.6 – 9.3	28 – 50	<12

- C. Mud level monitoring will be done visually.

4. HAZARDS

- A. Abnormal pressure is not expected in this area.
- B. Lost circulation is expected to be of minimal problems in this area.
- C. No hydrogen sulfide is expected. However, should hydrogen sulfide be encountered during drilling, detection and warning systems will be installed.
- D. Hole deviation is not expected in this area. Single shot surveys giving hole inclination will be run a minimum of every 500 feet.

5. LOGGING AND TESTING

- A. Induction and density logs will be run from total depth across all zones of interest.
- B. No drill stem tests are anticipated in this well.
- C. No cores are anticipated in this well.
- D. No mud logging unit will be used on this well.

6. CASING PROGRAM

- A. Surface casing: 7" 20.0 #/ft J-55 from surface to 120 feet
- B. Production casing: 4 ½" 10.5 #/ft J-55 from surface to 1660 feet.
- C. A proposed wellbore diagram is attached.

7. CEMENTING PROGRAM

- A. Surface casing: 38 sx (45 cf) Class B w/ 3% CaCl, circulated to surface
- B. Production Casing: 122 sx (262 cf) Premium Lite High Strength cement circulated to surface, volume may change due to caliper log on well.

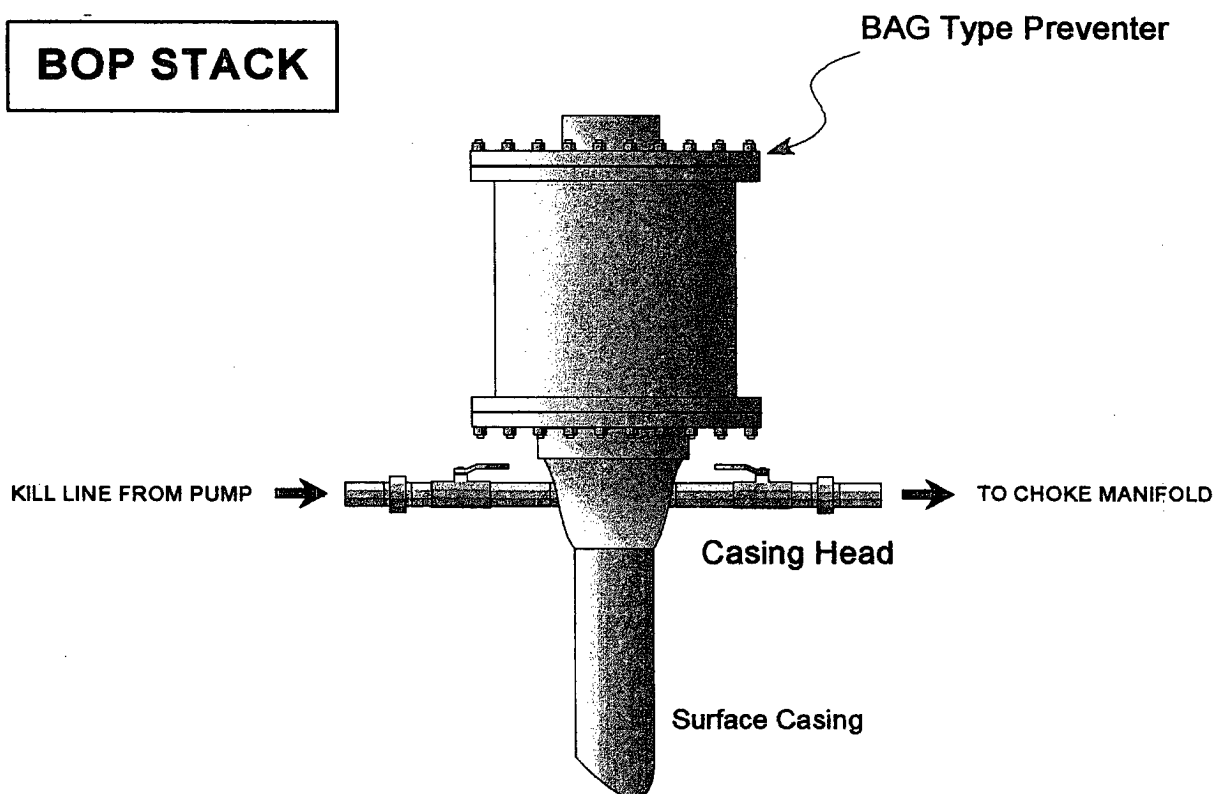
Robert L. Bayless, Producer LLC
Well Control Equipment Schematic for 1M Service

Attachment to APD Form 3160-3

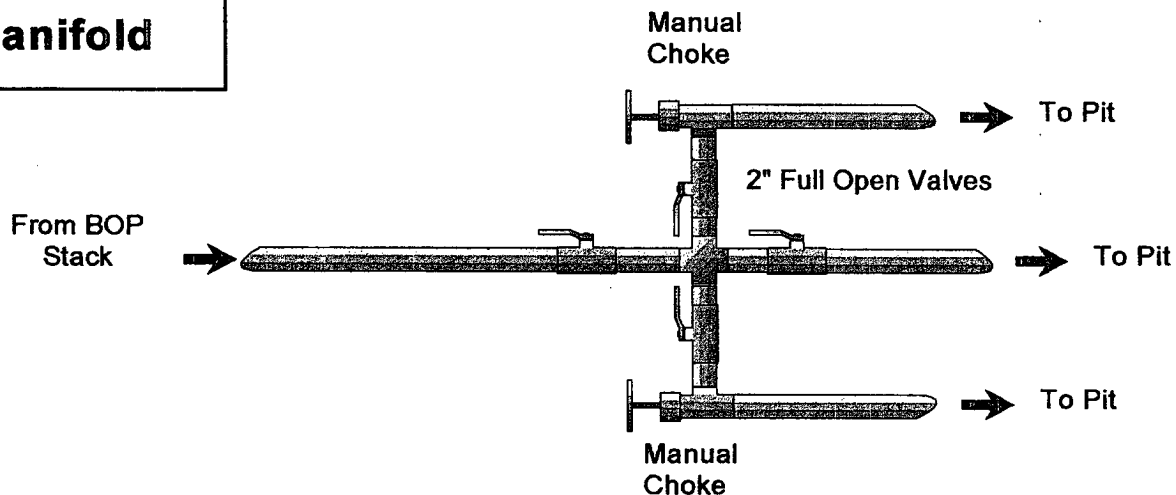
Horn Canyon #2

Location: 1335 FNL & 995 FEL
Sec 15, T28N, R11W, NMPM
San Juan County, New Mexico

BOP STACK



**Choke & Kill
Manifold**



Robert L. Bayless, Producer LLC
Wellbore Schematic
Horn Canyon #2
Proposed Wellbore Configuration

Location: 1335 FNL & 995 FEL (sene)
Sec 15, T28N, R11W, NMPM
San Juan Co, New Mexico

Elevation: 5501' GL
5506' RKB
Field: Basin Fruitland Coal

