

Expires: February 28, 1995

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. Lease Designation and Serial No.

SF 078841-B

6. If Indian, Allottee or Tribe Name

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work

DRILL ☒ DEEPEN ☐

7. Unit Agreement Name

b. Type of Well

Oil  
Well ☐Gas  
Well ☒Other ☐Single  
Zone ☒Multiple  
Zone ☐

8. Farm or Lease Name, Well No.

Hazel Bolack #10 #3

2. Name of Operator

Robert L. Bayless Producer, LLC

9. API Well No.

30045 32259

3. Address and Telephone No.

PO Box 168, Farmington, NM 87499

505-326-2659

10. Field and Pool, or Wildcat

Basin Fruitland Coal

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

At surface

825' FSL &amp; 1090' FEL

At proposed prod. Zone

same

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

Section 10 - T30N - R11W

14. Distance in Miles and Direction from nearest Town or Post Office\*

Within Aztec, NM

12. County or Parish

San Juan

13. State

New Mexico

15. Distance from Proposed\*

Location to nearest

825'

Property or Lease Line, ft.

(Also to nearest drlg. Unit line, if any)

18. Distance from Proposed Location\*

to nearest Well, Drilling, Completion,  
or applied for, on this Lease, ft.

103'

16. No. of Acres in Lease

17. No. of Acres Assigned  
to this Well

318.94

5/2

19. Proposed Depth

2440'

20. Rotary or Cable Tools

Rotary

21. Elevations (Show whether DF, FT, GR. Etc.)

5820 ~~3000~~ CH ~~1000~~ B

22. Approx. Date Work Will Start

ASAP

## PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Grade, Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
8 3/4"	J-55, 7"	23.0	120 ft	30 sx (35 cf)
6 1/4"	J-55, 4 1/2"	10.5	2440 ft	175 sx (375 cf)

Will drill 8 3/4" hole to 120' and set 120' 7" casing, cemented with 30 sx. Will drill to 2440' with a 6 1/4" hole and set 2440' 4 1/2" casing. Casing will be cemented with 175 sx. All casing is new. Circulating medium will be clear water, natural mud, and water loss control additives. No abnormal pressures or temperatures are expected. Induction and density logs will be run. Blowout preventer schematics are attached. Formation logs are attached.

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present production zone and proposed new productive zone.  
If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Signed

Title

Engineer

Date

March 29, 2004

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

Approved By

Title

Acting Field Manager

Date

6/22/04

\*See Instruction on Reverse Side - Minerals

Title 18 U.S.C. Section 1001 makes 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 manner within its jurisdiction.

NMOC

## 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

1220 S. St. Francis Dr., Santa Fe, NM 87505

## State of New Mexico

Energy, Minerals &amp; 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

API Number 30045-32259	Pool Code 71429	Pool Name Basin Fruitland Pool
Property Code 33504	Property Name H. BOLACK 10	Well Number 10-3
OGRID No. 150182	Operator Name ROBERT L. BAYLESS, PRODUCER LLC	Elevation 5820

## 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
P	10	30N	11W		825	South	1090	East	San Juan

## 11 Bottom Hole Location If Different From Surface

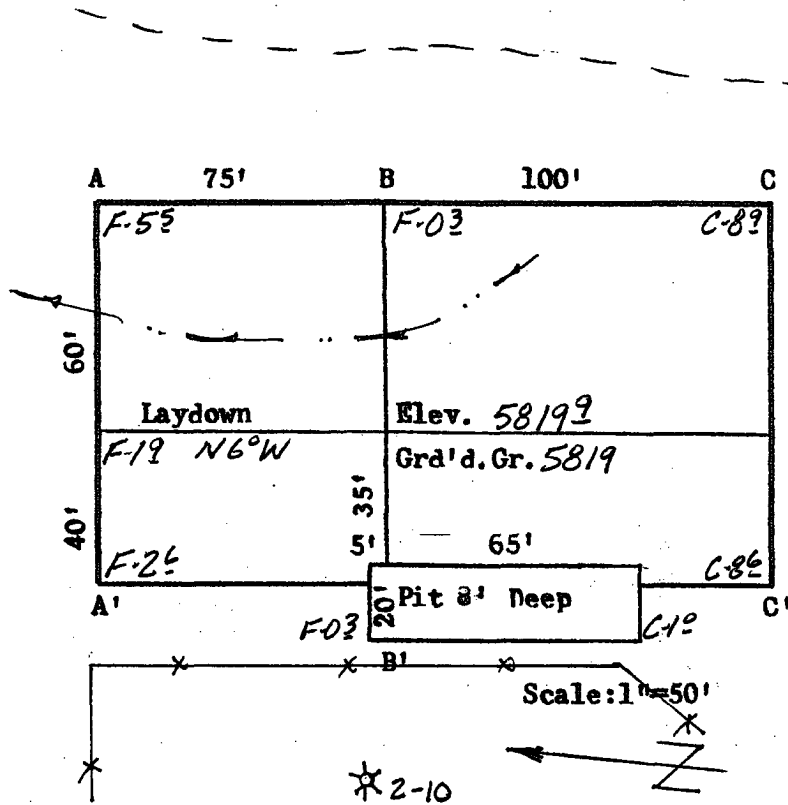
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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

16 RECEIVED JUN 1 2004 OIL CONSERVATION DIV. SANTA FE, NM	Lot No. (TYP.) 1	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature TOM M'CARTHY Printed Name ENGINEER Title 3/30/2004 Date
Sec. 10 Lot 36.81856°N Long. 107.96911°W N 89°37'W 77.82'W 1090' 825' F.L.B.C.	2	

ROBERT L. BAYLESS, PRODUCER LLC  
H. BOLACK #10-3  
825' FSL & 1090' FEL  
Sec. 10, T30N, R11W, NMPM  
San Juan Co., NM



A-A'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5820			
5810			
B-B'			
5820			
5810			
C-C'			
5820			
5810			

# **Robert L. Bayless, Producer LLC**

## **Drilling Technical Program**

(Attachment to Form 3160-3)

**Hazel Bolack #10-3**  
**825' FSL & 1090' FEL ("SESE")**  
**Section 10, T30N, R11W**  
**San Juan County, New Mexico**

### **1. ESTIMATED FORMATION TOPS**

<u>Formation</u>	<u>Depth KB</u>	<u>Est Pressure</u>
Ojo Alamo	840 feet	
Kirtland	950 feet	
Fruitland	1819 feet	556 PSI
Pictured Cliffs	2282 feet	662 PSI
Total Depth	2440 feet	

### **2. WELL CONTROL SYSTEM**

- A. The proposed blowout system schematic drawings are attached, and will be used in 1000 PSI service. It is a bag type blow out preventer; see page 9 of the APD. Bayless requests a waiver from O & G Order No. 2 requirements for 2M service since the well is shallow and low pressure, with the surface pressure not to exceed 350 PSI. Such moderate conditions lower any chance of uncontrolled gas flow.
- B. Maximum anticipated bottom hole pressure = 662 PSI. Well Control Anticipated Surface Pressure (ASP) =  $662 \text{ PSI} - (.22 \times 2440') = 125 \text{ PSI}$ , assuming a partially gas cut column per BLM guidelines.
- C. BOP pressure testing will be conducted at the time of installation and prior to drilling out surface casing shoe. The bag type preventer will be tested to 250 PSI. The BOP will be activated on each trip out of the hole and the results entered in the driller's log. A choke manifold will be installed as per attached drawing, (page 9 of the APD). Working pressure for the choke manifold is 1000 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 .29 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. An 8 ¾" surface hole will be drilled with a fresh water system. Lime and gel will be added to provide viscosity if needed.
- B. A 6 ¼" hole will be drilled to total depth utilizing a low solids non-dispersed mud system, (LSND). Additives such as starch, gel, and others will be used to control the mud properties. No materials of a hazardous nature will be added to the drilling mud in hazardous quantities. Lost circulation materials will be on location. No mud weighting materials will be stored on location.

Interval	Mud System	Weight PPG	Viscosity sec/qt	WL cc
0 – 120 ft	Spud mud	<9.0	35 – 55	NC
120 – TD	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 not expected to be a problem 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.

### 6. CASING PROGRAM

- A. Surface casing: 7" 23.0 #/ft J-55 from surface to 120 feet
- B. Production casing: 4 ½" 10.5 #/ft J-55 from surface to 2440 feet.

## **7. CEMENTING PROGRAM**

- A. Surface casing: 30 sx (35.4 cf) Class B w/ 2% CaCl, circulated to surface. This is an estimated volume. Cement will be pumped until cement circulates, then it will be displaced.**
  
- B. Production Casing: The long string production casing cement will be pumped as follows: 25 barrels gelled water flush, 10 barrels fresh water, 175 sacks (375 cf) Premium Lite High Strength cement with 1/4# cello-flake/sack, 1% KCL, 3# gilsonite/sack. This volume should provide a cement sheath around the production casing from total depth to the surface. These volumes are approximations and will be adjusted upon examination of open hole logs. If cement does not reach the surface a temperature or cement bond log will be run to determine the top of cement. The casing will be centralized through the Pictured Cliffs and Fruitland Coal and through any useable water zones. Turbo-centralizers will be run just below and into the base of the lowest water zone. A chronological log will be kept on the longstring cement job recording pump rate, pump pressure, slurry density, and slurry volume. This log will be provided to BLM upon completion of the job.**

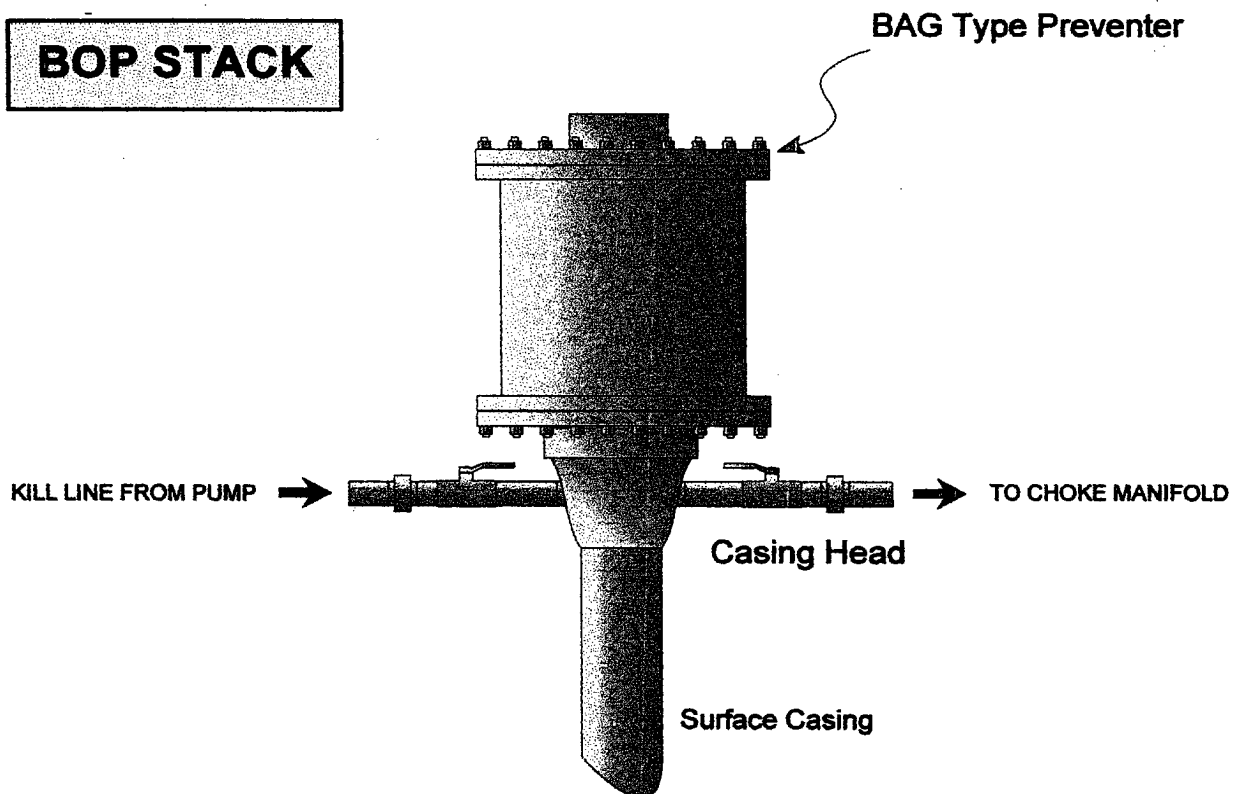
**R.L. Bayless, Producer LLC**  
**Well Control Equipment Schematic for 1M Service**

Attachment to APD Form 3160-3

**Hazel Bolack 10-3**

Location: 825 fsl & 1090 fel (se se)  
Sec 10, T30N, R11W, NMPM  
San Juan County, New Mexico

**BOP STACK**



**Choke & Kill  
Manifold**

