Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Carlsbad Field Office
OCD Artesia

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMLC029415B

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
NOSLER 12 FED DB 4H

2. Name of Operator
BURNETT OIL COMPANY INC
Contact: LESLIE GARVIS
E-Mail: lgarvis@burnettoil.com

9. API Well No.
30-015-43422-00-X1

3a. Address
801 CHERRY STREET UNIT 9
FORT WORTH, TX 76102-6881

3b. Phone No. (include area code)
Ph: 817.583.8730

10. Field and Pool, or Exploratory
FREN

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 11 T17S R31E NENE 600FNL 200FEL

11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Burnett Oil would like to request that the DV tool, 5.5?x7? cross over, and top isolation packer be moved from 5500?, up to 4800?, which is where kick off point will be located. We will be setting a sub pump near 4750?, which is at the base of the vertical portion of the well, and there is no need for 7? casing below where we will be setting the sub pump.

Revised Drilling Plan attached - changes are highlighted in red.

KRD 11-20-15
Accepted for record
NMOCD

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 09 2015
RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #322166 verified by the BLM Well Information System
For BURNETT OIL COMPANY INC, sent to the Carlsbad
Committed to AFMSS for processing by DUNCAN WHITLOCK on 11/05/2015 (16DW0008SE)

Name *(Printed/Typed)* LESLIE GARVIS — Title REGULATORY COORDINATOR

Signature (Electronic Submission) — Date 10/30/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By TEUNGKU MUCHLIS KRUENG — Title PETROLEUM ENGINEER — Date 11/05/2015

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

6666
BURNETT OIL CO., INC.

DRILLING PLAN
Nosler 12 Fed DB 4H
HORIZONTAL FREN GLORIETA YESO WELL

1. **Estimated Tops of Geological Markers and depths of anticipated fresh water, oil or gas:**

Geological Name	Estimate Top	Anticipated Fresh Water, Oil or Gas
Alluvium	Surface	There is no fresh water here
Anhydrite	698'	
Salt	883'	
Base Salt	1874'	
Yates	2058'	
Seven Rivers	2357'	Oil
Queen	2978'	Oil
Grayburg	3402'	Oil
San Andres	3717'	Oil
Glorieta	5223'	Oil
Yeso	5296'	Oil
Total Depth	Refer to APD	

No other formations are expected to yield fresh water, oil or gas in measurable volumes. There is no groundwater in the immediate vicinity where we will be drilling. We will set 13-3/8" casing at approximately +/- 790' in the Anhydrite above the salt and circulate cement to surface.

We will set 9-5/8" intermediate casing at around 2,000' and circulate cement to surface. All intervals will be isolated by setting 7" x 5-1/2" casing to total depth and circulating cement from +/-4,800' to 200' above the base of the 9-5/8" intermediate casing shoe.

2. **Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)**

(MW = 10 PPG IN DESIGN FACTOR CALCULATIONS.)

a. Design Safety Factors:

Type	Hole Size	Depth Interval	OD CSG	Weight	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
Conductor	24"	0-90'	20"	Contractor	Discretion	----------	----------	----------	----------
Surface	17-1/2"	0-790'	13-3/8"	48#	ST&C	H-40	1.125	1.00	1.80
Intermediate	12-1/4"	790'-2000'	9-5/8"	36#	LT&C	J-55	1.125	1.00	1.80
Production	8-3/4"	0-4800'	7"	26#	LT&C	L-80	1.125	1.00	1.80
	8-3/4"	4800'-5875'	5 1/2"	17#	BTC	L-80	1.125	1.00	1.80
	7-7/8"	5875'-TD	5-1/2"	17#	BTC	L-80	1.125	1.00	1.80

*** While running each casing string, the pipe will be kept at a minimum of 1/3 full at all times to avoid approaching the collapse pressure of the casing.**

b. **Surface Casing**

The proposed casing setting depth is +/- 790' based on cross sections which show the estimated top of the rustler and top of salt. Drilling times will be plotted to find the hard section just above the salt. A mud logger will be on location to evaluate drill and cutting samples as long as circulation is maintained. If salt is penetrated, it will be obvious by the sudden increase in water salinity and surface casing will then be set above the top of salt. Our highly experienced drilling personnel has drilled many wells in this area and is able to easily identify the hard streak on the top of the salt. Cement will be circulated to surface.

c. **Intermediate casing**

We will run 9-5/8" intermediate casing to 2,000' and circulate cement to surface to get the Salt section behind pipe.

d. **Production casing**

We will run 7" x 5-1/2" production casing with a stage tool at the bottom of the 7", then a crossover from 7" to 5-1/2". There will be no cement in the lateral, only from the stage tool and up hole into the intermediate casing.

Burnett proposes to run a multiple packer system on the 5-1/2" production casing which will cross over into the 7" casing string (no cement in the lateral). An isolation packer will be set at or a few feet inside the lease offset limit and no completion perforations or ports will be placed between this isolation packer and the cement stage tool.

All intervals will be isolated by setting 7" x 5-1/2" casing to total depth and circulating cement from +/-4,800' to above the base of the 9-5/8" intermediate casing shoe.

200 ft

3. **Cementing Program (Note Yields and DV Tool Depth if Multiple Stage)**

BLM to be notified prior to all cementing and tag operations in order to observe the operation if desired.

a. **13 3/8 " Surface Casing – Cement to Surface**

- 20 bbls fresh water spacer at 8.4 lbm/gal.
- Lead: 345 sx ExtendaCem – CZ 0.1250 lbm Poly-E-Flake. Fluid weight 13.5 lbm/gal, slurry yield 1.745 ft3/sx, total mixing fluid 9.18 gal/sx.
- Tail: 355 sx HalCem 2% Calcium Chloride – flake, fluid weight 14.8 lbm/gal, slurry yield 1.347 ft3/sx, total mixing fluid 6.39 gal/sx.
- Excess Cement 100%
- **If cement does not circulate to surface, BLM will be notified of same, and advised of the plan to bring the cement to surface so BLM may witness tagging and cementing. If surface pressures when circulating indicate cement is low in the annulus, temperature**

survey results will be reviewed with BLM representative to determine the remediation needed.

b. **9 5/8" Intermediate Casing:**

- Lead: 500 sx ExtendaCem – CZ 0.1250 lbm Poly-E-Flake, Fluid weight 13.5 lbm/gal, slurry yield 1.745 ft3/sx, total mixing fluid 9.2 gal/sx.
- Tail: 225 sx HalCem fluid weight 14.8 lbm/gal, slurry yield 1.326 ft3/sx, total mixing fluid 6.34 gal/sx.
- Casing/Cementing design is to bring cement to the surface.
- **If cement does not circulate to surface, BLM will be notified of same, and advised of the plan to bring the cement to surface so BLM may witness tagging and cementing. If surface pressures when circulating indicate cement is low in the annulus, temperature survey results will be reviewed with BLM representative to determine the remediation needed.**

c. **7" and 5 ½" Production Casing**:

- Displace mud from lateral with fresh water.
- Open stage tool and pump the following cement. Lead: 250 sx EconoCem – C, 0.1250 lbm Poly-E-Flake, 0.25 lbm D-Air 5000, fluid weight 11.9 lbm/gal, slurry yield 2.464 ft3/sx, total mixing fluid 14.24 gal/sx.
- Tail: 160 sx Halcem, 0.50% LAP-1, 0.25 lbm D-Air 5000, 0.40% CFR-3, 0.10% HR-800, fluid weight 14.8 lbm/gal, slurry yield 1.33 ft3/sx, total mixing fluid 6.29 gal/sx.
- All intervals will be isolated by setting 7" x 5-1/2" casing to total depth and circulating cement from +/-4,800' to above the base of the 9-5/8" intermediate casing shoe.

8,000ft

The above cement volumes may be revised pending the caliper measurement from the open hole logs.

4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in **Exhibit O** will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested to 2,000psi and maintained for at least ten (10) minutes. The 10-3/4" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

5. Auxiliary Well Control and Monitoring Equipment:

a. A Kelly cock will be in the drill string at all times.

b. A full opening drill pipe stabbing valve with the appropriate connections will be on the rig floor at all times.

c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation at a drilling depth of 1800' (which is more than 500' above top of Grayburg) and will remain until production casing is cemented.

d. An H2S compliance package will be on all sites while drilling.

6. Proposed Mud Circulation System (Closed Loop System)

Depth	Mud Wt	Vis	Fluid Loss	Type System
0' - 790'	8.4 - 9.5		NC	Fresh Water
790' - 2000' MD	10.0		NC	Brine Water
2000' – TD MD	10.0		NC	Brine Water

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Pason equipment will be used to monitor the mud system.

7. Logging, Coring and Testing program:

a. No cores or DSTs are planned at this time.

b. A mud logger will be on the well from 200' to TD.

c. No open hole logs will be run.

8. Potential Hazards:

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in the production hole. Water flows can occur periodically at various depths in the production hole. All personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom hole pressure is 2392#. This is based upon the following formula of .445 x BH ft. estimate. The anticipated bottom hole temperature is 105°F. This is based upon logs of drilled wells surrounding this well.

There is known H2S in this area. In the event that it is necessary to follow the H2S plan, a remote choke will be installed as required in Onshore Order 6. Refer to the attached H2S plan for details.

9. Anticipated Start Date and Duration of Operation

Road and location construction will begin after BLM has approved the APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in operations and drilling is expected to take approximately 25 days. If production casing is run, an additional 90 days would be

required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) in order to place the well on production.