

NM OIL CONSERVATION ARTESIA

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FEB 2 2015

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

SUNDRY NOTICES AND REPORTS ON WELLS RECEIVED
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.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Serial No. NMLC029338A
2. Name of Operator BURNETT OIL CO. INC.	6. If Indian, Allottee or Tribe Name
3a. Address BURNETT PLAZA - SUITE 1500 801 CHERRY STREET FORT WORTH, TX 76102	7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) 817-382-5100 EXT. 326	8. Well Name and No. GISSLER A 32
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 14 T17S R30E Mer NMP SWNE 1650FNL 2310FEL	9. API Well No. 30-015-36036
10. Field and Pool, or Exploratory CEDAR LAKE GLORIETA YESO	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			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture/Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recomplate 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.)

8/18/14 - SQUEEZED @ 4890? W/300 SX CLASS C W/3% CC CMT.

8/19/14 - PUMP 300 SX CLASS C 2% CC AND 150 SX CLASS C NEAT, PRESSURE TO 500 PSI. USED 750 SX CEMENT, 68 SX REVERSED OUT.

9/1/14 - HOLE SIZE: 6 1/8". RIG UP. NU AND TEST BOPE TO 2000 PSI HIGH AND 250 PSI LOW TEST (TEST OK), NOTIFY MICHAEL W/ BLM OF NU & TEST @ 12:00 NOON, 8/30/2014.

9/3/14 - TD: 5,978'. RU HALLIBURTON LOGGING, PJM, RU HOWCO LOGGING, QUAD COMBO W/SPECTRAL GR/GR/DLL/ MICRO LOG/DSN/SD/COMPESATED SONIC, BH CALIPER, LOGGERS TD 5972'. LEFT MESSAFE W RICHARD CARRASCO/BLM OF PROD RUN AND CMT LINER AT 8:00 AM 9-2-14.

Accepted for record
WDS **NMOC** 2/11/15

14. I hereby certify that the foregoing is true and correct.		Electronic Submission #283710 verified by the BLM Well Information System For BURNETT OIL CO. INC., sent to the Carlsbad Committed to AFMSS for processing by DEBORAH HAM on 01/16/2015	
Name (Printed/Typed) LESLIE GARVIS	Title REGULATORY COORDINATOR	<div style="border: 2px solid black; padding: 5px; display: inline-block;"> ACCEPTED FOR RECORD JAN 23 2015 <i>Deborah Ham</i> BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE </div>	
Signature (Electronic Submission)	Date 12/02/2014		
THIS SPACE FOR FEDERAL OR STATE OFFICE USE			
Approved By _____	Title _____		
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 _____	

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #283710 that would not fit on the form

32. Additional remarks, continued

9/4/14 - RR 4:00 PM, 09/04/14. 5 1/2" J-55, 15.5#, FJM THREADED CASING ,TOTAL PIPE & ACCESS 1870.69', FLOAT SHOE SET @ 5978', LANDING COLLAR SET @ 5930', TOP OF LINER HANGER @ 4099'. CEMENT W/ 155 SKS(37 BBL)@14.3 PPG, YIELD 1.34 50/50 P/C+ 5%PF44(BWOW)(SALT)+2%PF20(BENTONITE GEL)+7%PF606 (FLUID LOSS)+ PF65 DISPERSANT+ 0.4#/SKPF46DEF.

11/5/14 - PERF LOWER BLINEBRY @ 5,892', 5,882', 5,784', 5,772', 5,740', 5,712', 5,694', 5,686', 5,680', 5,668', 5,644', 5,638', 5,628', 5,618', 5,606' & 5,576' (3 SPF, 48 HOLES). SPOT 300 GAL 15% HCL ACID ACROSS PERFS. ACIDIZE LOWER BLINEBRY PERFS FR 5,576' - 5,892' W/2,200 GAL 15% HCL ACID. SPACED 72 BALLS IN ACID.

11/7/14 - SLICK WATER FRAC LOWER BLINEBRY FR 5,576' - 5,892' DWN 7" PROD CSG TO 5-1/2" LINER @ 4,099' W/6,266 BBLS SLICK WTR, 20,462# 100# MESH & 170,123# 40/70 OTTAWA. SPOT 2,000 GAL 15% HCL ACID. PERF UPPER BLINEBRY #1 @ 5,474', 5,462', 5,452', 5,436', 5,426', 5,410', 5,400', 5,304', 5,294', 5,282', 5,264', 5,242', 5,234', 5,214', 5,202' & 5,196' (3 SPF, 48 HOLES). SLICK WTR FRAC UPPER BLINEBRY #1 FR 5,196' - 5,474' PMP RATE @ 13 BPM W/3,400 PSIG. BULL HEAD 1,000 GAL 15% HCL ACID. FRAC W/6,338 BBLS SLICK WTR, 21,858# 100# MESH & 170,020# 20/40 OTTAWA. SPOT 2,000 GAL 15% HCL ACID. PERF UPPER BLINEBRY #2 @ 5,136', 5,132', 5,106', 5,102', 5,090', 5,076', 5,062', 5,056', 5,016', 4,998', 4,988', 4,982', 4,952', 4,944' & 4,934' (3 SPF, 45 HOLES).

11/10/14 - SLICK WATER FRAC UPPER BLINEBRY #2 FR 4,934' - 5,136' DWN 7" PROD CSG TO 5-1/2" LINER @ 4,099' W/6,338 BBLS SLICK WTR, 23,120# 100# MESH & 171,897# 40/70 OTTAWA.

11/13/14 - 151 JTS 2-7/8" J-55= 4,747.12'.

11/15/14 - 32 BO, 220 BLW, 110 MCF, 694 BHP, 1487' FLAP, 19,244 BLWTR, 45# CSG, 150# TBG, 57 HZ

11/27/14 - 24 Hr Test: 131 BO, 407 BLW, 269 MCF, 312 BHP, 443' FLAP, 13,908 BLWTR, 120# CSG, 150# TBG, 57 HZ

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 2 2015

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

SUNDRY NOTICES AND REPORTS ON WELLS
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SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMLC028731B
2. Name of Operator COG OPERATING LLC Contact: ROBYN ODOM E-Mail: rodome@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-685-4385	7. If Unit or CA/Agreement, Name and/or No. NMNM111789X
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 11 T17S R29E SWSW 330FSL 1310FWL		8. Well Name and No. DODD FEDERAL UNIT 584
		9. API Well No. 30-015-40664-00-X1
		10. Field and Pool, or Exploratory DODD - GLORIETA-UPPER YESO
		11. County or Parish, and State EDDY COUNTY, NM

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

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<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change to Original A PD
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
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COG Operating LLC respectfully requests a two year extension to this APD scheduled to expire 09/05/2014.

Surface: All previously approved COA's apply per
Accepted for record
LED NMOC 2/11/15

APPROVED FOR 24 MONTH PERIOD
ENDING 9-5-16

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Eng Rev. JAM 1/16/15 ~ new COAs drafted

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #259768 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JENNIFER MASON on 01/05/2015 (15JAM0143SE)	
Name (Printed/Typed) ROBYN ODOM	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 09/02/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>Stephen J Coffey</u>	Title <u>For FIELD MANAGER</u>	Date <u>1/21/15</u>
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 <u>CARLSBAD FIELD OFFICE</u>

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 **

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING, LLC
LEASE NO.:	LC028731B
WELL NAME & NO.:	584-DODD FEDERAL UNIT
SURFACE HOLE FOOTAGE:	330'/S. & 1310'/W.
LOCATION:	Section 11, T. 17 S., R. 29 E., NMPM
COUNTY:	Eddy County, New Mexico
API:	30-015-40664

The original COAs still stand with the following drilling modifications:

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. **The record of the drilling rate along with the GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium Cave/Karst

Possible water and brine flows in the Salado and Artesia Group.

Possible lost circulation in the Grayburg and San Andres formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 300 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.**
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.**

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is:
(Set casing below the salt at approximately 985')

Option #1 (Single Stage):

- ☒ Cement to surface as proposed. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

Option #2:

Operator has proposed a DV tool at 350', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

- a. First stage to DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

- b. Second stage above DV tool:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

If 75% or greater lost circulation occurs while drilling the intermediate casing hole, the cement on the production casing must come to surface.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

Option #1 (Single Stage):

- ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

Option #2:

Operator has proposed DV tool at depth of 2500', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

- a. First stage to DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve tie-back on the next stage.

- b. Second stage above DV tool:

- ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. **In the case where the only BOP installed is an annular preventer, it shall be tested to a minimum of 2000 psi (which may require upgrading to 3M or 5M annular).**
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 011615