

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
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 page 2

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
COG Operating, LLC

3a. Address
600 W. Illinois, Midland, TX 79701

3b. Phone No. (include area code)
432-686-3087

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**Sec 23 T17S R29E Mer NMP NWSW Unit N
660FSL 1980FWL**

5. Lease Serial No.
NMLC028793C

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM88525X

8. Well Name and No.
Burch Keely Unit #120

9. API Well No.
30-015-03052

10. Field and Pool, or Exploratory Area
Burch Keely CL- Upper Yeso

11. County or Parish, State
Eddy Co, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" 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 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 type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input checked="" 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 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.)

1. Set 5 1/2 CIBP @ 3225'. Circulate hole w/ mud laden fluid. Pressure test 7" csg & 5 1/2 liner. Spot 25 sx @ 3225-3100'.
2. Spot 35 sx @ ~~2542-2442'~~ 2586. WOC & Tag.
3. Spot 25 sx @ 2230-2130'. WOC & Tag.
4. Perf & Sqz 45 sx @ 900-800'. WOC & Tag.
5. Perf & Sqz 125 sx @ 465-200'. WOC & Tag (Shoe, T Salt).
6. Perf & Sqz 45 sx @ 60-surface.
7. Cuff of well head, weld on Dry Hole Marker.

Accepted for record
NMOC
A.L.B.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ARTESIA DISTRICT
FEB 06 2017

14. I hereby certify that the foregoing is true and correct.
 Name (Printed Type) _____ Title Agent
 Signature [Signature] Date 1-19-17

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by [Signature] Title Eng Date 2/1/17
 Office CFO

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 page 2)

COG Operating, LLC

Lease & Well #
 3001503052
Spud date 1-17-42
Completion date 3-4-42
Elevation - 3591

Burch Keely Unit 120

Sec 23 T 17S R 29E, Unit N, 660 FSL & 1980 FWL
 EDDY CO., NM

Calculated top of cement @ 236'

12 1/4" hole
 8 5/8" 24# @ 415', cmt w/75 sx.

Calculated top of cement @ 1564'

Casing cementing calculations

8 5/8" 24# 12.25" Surface hole
 Cement volume = 75 X 1.32 CF/SK = 99 cu. Ft. slurry
 99 - 25% slurry loss for shoe joint & hole loss = 74 CF
 74 CF X ann. Vol. of 2.4229 FT/CF = 179'
 415 - 179 = 236' estimated (calculated) top of cement.

7" 20# 7 7/8" hole
 Cement volume = 75 X 1.32 CF/SK = 99 cu.ft. slurry.
 99 - 30% slurry loss for shoe joint & hole loss = 69 CF
 69 CF X ann. Vol. of 14.0845 FT/CF = 972'
 2536 - 972 = 1564' estimated (calculated) top of cement.

TOL 5 1/2" @ 2492'

7" 20# csg @ 2536' w/ 75 sxs.

TOC @ 2750' by TS.

A OH w/1500 gals HCL 3-2-42
 F 70 BOPD 3-4-42
 Injected 689,624 MCF from 11-9-45 to 10-31-54
 Perf'd @ 2260'-2850'. 2-1-91
 Frac'd 2260'-2274' w/ 5,000 gals polyemulsion & 15,000# 16/30. 3-11-91
 A/ 2340-2412 w/ 1500 gals 2-18-91
 Frac'd w/ 13,500 gals polyemulsion & 67,000# 20/40. 2-22-91
 A/ 2768-2850 w/ 5000 gals 20%. 2-14-91
 P 73 BO, 30 MCF, & 26 BW 3-20-91
 Original TD @ 2892'
 Perf'd @ 3048'-3074' A/ 1,000 gals 20%.
 Frac'd w/ 33,264 gals CO, 30,000# 40/60 & 30,000# 20/40. 8-28-61
 F 204 BOPD 9-10-61
 A/ 3048'-3074' w/ 2500 gals 20% 2-8-91
 6 1/4" hole.
 Set 5 1/2" 15 5# liner @ 2492' to 3249' w/35' sxs TOC @ 2750' by TS. 1-1-57
 Deepened to 3325' Frac'd OH w/ 36,036 gals CO, 750# 40/60, & 60,000# 20/40.
 F 343 BO 1-7-57
 A/ OH w/ 5,000 gals 20% 2-5-91

PBD @ 3325'

TD @ 3325'. 1-6-57

32.8146248

-104.0475845

COG Operating, LLC

Lease & Well #
 3001503052
 Spud date 1-17-42
 Completion date 3-4-42
 Elevation - 3591

Burch Keely Unit 120
 Sec 23 T 17S R 29E, Unit N, 660 FSL & 1980 FWL
 EDDY CO., NM

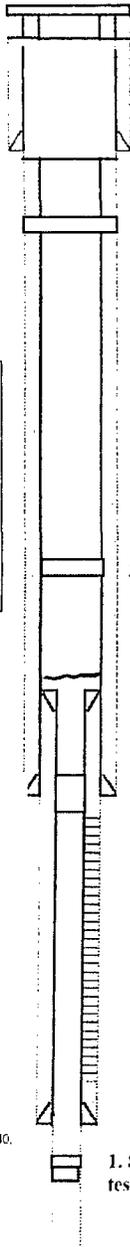
Calculated top of cement @ 236'
 12 1/4" hole
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Calculated top of cement @ 1564'

Casing cementing calculations
 8 5/8" 24# 12 25" Surface hole
 Cement volume = 75 X 1.32 CF/SK = 99 cu ft slurry
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 74 CF X ann. Vol of 2.4229 FT/CF = 179'
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 7" 20# 7 7/8" hole
 Cement volume = 75 X 1.32 CF/SK = 99 cu ft slurry
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 69 CF X ann. Vol of 14.0845 FT/CF = 972'
 2536 - 972 = 1564' estimated (calculated) top of cement

7" 20# csg @ 2536' w/ 75 sx.
 A OH w/1500 gals HCL 3-2-42
 F 7C BOPD 3-4-42
 Injected 682,624 MCF from 11-9-45 to 10-31-54
 Perfd @ 2260'-2950' 2-1-51
 Frac'd 2260'-2274' w/ 5,000 gals polyemulsion & 15,000# 1600 3-11-51
 A/ 2340-2412 w/ 1500 gals 2-1E-51
 Frac'd w/ 2,500 gals polyemulsion & 67,000# 20#C 2-22-51
 A/ 2768-2856 w/ 5000 gals 20% 2-14-51
 F 73 BO, 30 MCF 5.75 BW 3-20-51
 Original TD @ 2892'
 Perfd @ 2043'-3074' w/ 1,000 gals 20%
 Frac'd w/ 33,200 gals CC, 30,000# 4#W60 & 30,000# 20#C 8-28-51
 F 204 BOPD 5-10-51
 A/ 3048'-3074' w/ 2500 gals 20% 2-6-51
 6 1/4" hole.
 Set 5 1/2" 15 5/8" liner @ 2100' to 3225' w/ 35' toe TOC @ 2750' by TS 1-6-57
 Deepened to 3325' Frac'd OH w/ 56,035 gals CO, 750# 40#C, & 60,000# 20#C
 F 345 EO 1-7-57

PBD @ 3325'



6. Perf & Sqz 45 sx @ 60-surface.

5. Perf & Sqz 125 sx @ 465-200'. WOC & Tag (Shoe, T Salt).

4. Perf & Sqz 45 sx @ 900-800'. WOC & Tag.

3. Spot 25 sx @ 2230-2130'. WOC & Tag.

2. Spot 35 sx @ ~~2542-2442~~' WOC & Tag.

1. Set 5 1/2 CIBP @ 3225'. Circulate hole w/ mud laden fluid. Pressure test 7" csg & 5 1/2 liner. Spot 25 sx @ 3225-3100'.

A/ OH w/ 5,000 gals 20% 2-5-51

TD @ 3325' 1-6-57

T/salt 322
 T/yts 926
 T/SA 2504

2586

32.814 248 -104.0475845

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

Permanent Abandonment of Federal Wells
Conditions of Approval (LPC Habitat)

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Below Ground Level Cap (Lesser Prairie-Chicken Habitat): All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.** Upon the plugging and subsequent abandonment of wells that are located in lesser prairie-chicken habitat, the casings shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. A weep hole shall be left in the plate and/or casing.

NMOCD also requires the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a below ground cap was installed as required in the COA's from the BLM.

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.

Timing Limitation Stipulation/ Condition of Approval for Lesser Prairie-Chicken:

From March 1st through June 15th annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted