Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION OCOTARES DISTRICT

FORM APPROVED

)	OMB NO. 1004-0137 Expires: January 31, 201
5.	Lease Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS FEB 2 6 20%

NMLC028793A

abandoned wel	6. II	6. If Indian, Allottee or Tribe Name					
SUBMIT IN 1	7. It	7. If Unit or CA/Agreement, Name and/or No. NMNM88525X					
1. Type of Well		8. Well Name and No. BURCH KEELY UNIT 54					
2. Name of Operator COG OPERATING LLC		9. API Well No.					
3a. Address	E-Mail: Abbym@bcma	b. Phone No. (include area code)		30-015-04199-00-S1			
600 W ILLINOIS AVENUE MIDLAND, TX 79701		th: 432-580-7161	1.00	10. Field and Pool or Exploratory Area GRAYBURG			
4. Location of Well (Footage, Sec., T.	11.	11. County or Parish, State					
Sec 19 T17S R30E NWNE 66	E	EDDY COUNTY, NM					
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA							
TYPE OF SUBMISSION TYPE OF ACTION							
✓ Notice of Intent	☐ Acidize	□ Deepen	☐ Production (S	Start/Resume)	☐ Water Shut-Off		
	☐ Alter Casing	☐ Hydraulic Fracturing	□ Reclamation		■ Well Integrity		
☐ Subsequent Report	☐ Casing Repair	■ New Construction	☐ Recomplete		☐ Other		
☐ Final Abandonment Notice	☐ Change Plans	Plug and Abandon	□ Temporarily	Abandon			
j	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal				
following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160.4 must be filed once testing has been completed. Final Abandonment Notices must 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 7" CIBP @ 2490'. Circulate hole w/ MLF. Pressure test csg. Spot 25 sx cmt @ 2490-2390' 2. Spot 30 sx cmt @ 2000-1850'. WOC & Tag (Queen) 3. Perf & Sqz 80 sx cmt @ 1200-1000'. WOC & Tag 4. Perf & Sqz 50 sx cmt @ 525-425'. WOC & Tag (8 5/8" Shoe) 5. Perf & Sqz 50 sx cmt @ 100'-Surface. 6. Cut off well head, verify cmt to surface, weld on Dry Hole Marker. Accepted for record • NMOCD RECLAMATION PROCEDURE ATTACHED FOR CONDITIONS OF APPROVAL							
14. I hereby certify that the foregoing is true and correct. Electronic Submission #401212 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JAMES AMOS on 01/24/2018 (18JA0119SE) Name (Printed/Typed) ABIGAIL MONTGOMERY Title AGENT							
Signature (Electronic Submission) Date 01/17/2018							
THIS SPACE FOR FEDERAL OR STATE OFFICE USE							
Approved By	a. amos	Title See	AV. SE	<i>T</i>	Z-14-18 Date		
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu	itable title to those rights in the sub ct operations thereon.	bject lease Office	Ishad				
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.							

COG Operating, LLC

Lease & Well

Burch Keely Unit 54

3001504199

Spud date 6-18-36 Completion date 8-24-36

Elevation - 3638

Calculated TOC @ 354

Calculated TOC @ 1321'

Sec 19 B T 17S R 30E, 660 FNL & 1980 FEL EDDY CO.. NM

10 3/4" hole

8 5/8" 32# @ 475, Cmt w/50 sx.

Casing cementing calculations

8 5/8" 32# 10 3/4" Surface hole **

Cement volume. = $50 \times 1.32 \text{ CF/SK} \approx 66 \text{ cu. Ft. slurry}$ $66 \cdot 25\% \text{ slurry loss for shoe joint & hole loss = <math>50.0 \text{ CF}$ 50 CF X ann. Vo! of 2.4229 FT/CF = 121'

475 - 121 =354' estimated (calculated) top of cement.

7" 24# @ 2715' 8 1/4" hole

Cement volume = 100 X 1.32 CF/SK = 132 cu ft. slurry. 132 - 25% slurry loss for shoe joint & hole loss =99 CF 99 CF X ann. Vol. of 14,0845 FT/CF =1394'

2715 -1394 = 1321' estimated (calculated) top of cement

Grayburg

2538 - 2620 Frac w/40,000 GW | 40,000 # sc 2-7-73

IP P 26 BO 30 MCF & 11 BW - 2-16-73

7" 24 # csg @ 2715" w/ 100 sxs.
Acidized OH w: 1000 gats 8-31-36
F 440 BO 8-31-36 San Andres
Acidized OH w/ 2000 gats 6-20-37
Acidized OH w/ 1000 gats 12-10-41
Fracid OH w/1680 gats condensate, 3024 gats LO.
9366 gats RO, 6342 gats LO & 20,000# sd | 5-2-55
F 13 BO 9-15-55

Origina TD @ 31571

COG Operating, LLC

Lease & Well #

Burch Keely Unit 54

3001504199

Spud date 6-18-36 Completion date 8-24-36

Elevation - 3638

Sec 19 B T 17S R 30E, 660 FNL & 1980 FEL EDDY CO. NM

Calculated TOC @ 354'

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8 5/8" 32# @ 475, Cmt w/50 sx. -

4. Perf & Sqz 50 sx cmt @ 525-425'. WOC & Tag (8 5/8" Shoe)

Bloaff 920

3. Perf & Sqz 80 sx cmt @ 1200-1000' WOC & Tag

Yatas 1106

Calculated TOC @ 1321'

Casing cementing calculations

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2. Spot 30 sx cmt @ 2000-1850' WOC & Tag (Queen)

1 Set 7" CIBP @ 2490" Circ. Hole w/ MLF. Pressure test csg. Spot 25 sx cmt @ 2490-2390

2538 2620 Frac w/40,000 GW, 40,000 # sd 2-7-73

JP P 26 BO, 30 MCF. & 11 BVy 2-16-75

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Acidized OH w/ 1000 gals 12-10-41 Frac'd OH w/1680 gals condensate, 3024 gals LO, 9366 gals RO, 6342 gals LO & 20,000# sd | 5-2-55 F 13 BO 5-15-55

Original TD @ 3157' - 3645 No Csq.

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 <u>ninety (90)</u> 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. <u>Notification:</u> 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. <u>Blowout Preventers</u>: 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. <u>Mud Requirement</u>: 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. <u>Cement Requirement</u>: 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. <u>Subsequent Plugging Reporting</u>: 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. <u>Trash</u>: 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.

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



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 E. Greene St. Carlsbad, New Mexico 88220-6292 www.blm.gov/nm



In Reply Refer To: 1310

Reclamation Objectives and Procedures

Reclamation Objective: Oil and gas development is one of many uses of the public lands and resources. While development may have a short- or long-term effect on the land, successful reclamation can ensure the effect is not permanent. During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land and water are restored.

The long-term objective of final reclamation is to set the course for eventual ecosystem restoration, including the restoration of the natural vegetation community, hydrology, and wildlife habitats. In most cases this means returning the land to a condition approximating or equal to that which existed prior to the disturbance. The final goal of reclamation is to restore the character of the land and water to its predisturbance condition. The operator is generally not responsible for achieving full ecological restoration of the site. Instead, the operator must achieve the short-term stability, visual, hydrological, and productivity objectives of the surface management agency and take steps necessary to ensure that long-term objectives will be reached through natural processes.

To achieve these objectives, remove any and all contaminants, scrap/trash, equipment, pipelines and powerlines (Contact service companies, allowing plenty of time to have the risers and power lines and poles removed prior to reclamation, don't wait till the last day and try to get them to remove infrastructure). Strip and remove caliche, contour the location to blend with the surrounding landscape, re-distribute the native soils, provide erosion control as needed, rip and seed as specified in the original APD COA. This will apply to well pads, facilities, and access roads. Barricade access road at the starting point. If reserve pits have not reclaimed due to salts or other contaminants, submit a plan for approval, as to how you propose to provide adequate restoration of the pit area.

- 1. The Application for Permit to Drill or Reenter (APD, Form 3160-3), Surface Use Plan of Operations must include adequate measures for stabilization and reclamation of disturbed lands. Oil and Gas operators must plan for reclamation, both interim and final, up front in the APD process as per Onshore Oil and Gas Order No. 1.
- 2. For wells and/or access roads not having an approved plan, or an inadequate plan for surface reclamation (either interim or final reclamation), the operator must submit a proposal describing the procedures for reclamation. For interim reclamation, the appropriate time for submittal would be when filing the Well Completion or Recompletion Report and Log (Form 3160-4). For final reclamation, the appropriate time for submittal would be when filing the Notice of Intent, or the Subsequent Report of Abandonment, Sundry Notices and Reports on Wells (Form 3160-5). Interim reclamation is to be completed within 6 months of well completion, and final reclamation is to be completed within 6 months of well abandonment.
- 3. The operator must file a Subsequent Report Plug and Abandonment (Form 3160-5) following the plugging of a well.
- 4. Previous instruction had you waiting for a BLM specialist to inspect the location and provide you with reclamation requirements. If you have an approved Surface Use Plan of Operation and/or an approved Sundry Notice, you are free to proceed with reclamation as per approved APD. If you

have issues or concerns, contact a BLM specialist to assist you. It would be in your interest to have a BLM specialist look at the location and access road prior to the removal of reclamation equipment to ensure that it meets BLM objectives. Upon conclusion submit a Form 3160-5, Subsequent Report of Reclamation. This will prompt a specialist to inspect the location to verify work was completed as per approved plans.

- 5. The approved Subsequent Report of Reclamation will be your notice that the native soils, contour and seedbed have been reestablished. If the BLM objectives have not been met the operator will be notified and corrective actions may be required.
- 6. It is the responsibility of the operator to monitor these locations and/or access roads until such time as the operator feels that the BLM objective has been met. If after two growing seasons the location and/or access roads are not showing the potential for successful revegetation, additional actions may be needed. When you feel the BLM objectives have been met submit a Final Abandonment Notice (FAN), Form 3160-5, stating that all reclamation requirements have been achieved and the location and/or access road is ready for a final abandonment inspection.
- 7. At this time the BLM specialist will inspect the location and/or access road. If the native soils and contour have been restored, and the revegetation is successful, the FAN will be approved, releasing the operator of any further liability of the location and/or access road. If the location and/or access road have not achieved the objective, you will be notified as to additional work needed or additional time being needed to achieve the objective.

If there are any questions, please feel free to contact any of the following specialists:

Jim Amos Supervisory Petroleum Engineering Tech 575-234-5909, 575-361-2648 (Cell)

Arthur Arias Environmental Protection Specialist 575-234-6230

Henryetta Price Environmental Protection Specialist 575-234-5951

Shelly Tucker Environmental Protection Specialist 575-234-5979

Trishia Bad Bear, Hobbs Field Station Natural Resource Specialist 575-393-3612