Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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)R T	В	27	20%

FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018

Lease Serial No.

SUNDRY	NMLC028793C								
Do not use thi abandoned we	6. If Indian, Allottee or Tribe Name								
SUBMIT IN	7. If Unit or CA/Agreement, Name and/or No. NMNM88525X								
Type of Well Oil Well Gas Well	8. Well Name and No. BURCH KEELY UNIT 72								
Name of Operator COG OPERATING LLC	9. API Well No. 30-015-03057-00-S1								
3a. Address 600 W ILLINOIS AVENUE MIDLAND, TX 79701		. (include area code) 0-7161		10. Field and Pool or Exploratory Area GRAYBURG					
4. Location of Well (Footage, Sec., T		11. County or Parish, State							
Sec 23 T17S R29E SWNW 28	380FSL 855FWL		EDDY COUNTY, NM						
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE OF	NOTICE,	REPORT, OR OTH	IER DATA			
TYPE OF SUBMISSION	ACTION								
Notice of Intent	☐ Acidize		Deepen		ion (Start/Resume)	■ Water Shut-Off			
_	☐ Alter Casing	☐ Hyd	raulic Fracturing	□ Reclam	ation	■ Well Integrity			
☐ Subsequent Report	☐ Casing Repair ☐ Ne		Construction	□ Recomp	olete	☐ Other			
☐ Final Abandonment Notice	☐ Change Plans	🛭 Plug	□ Plug and Abandon		arily Abandon				
	☐ Convert to Injection	Plug	Plug Back		Disposal				
Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must 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 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 5 1/2" CIBP @ 3190'. Circulate hole w/ MLF. Pressure test csg. Spot 25 sx cmt @ 3190-2990'. 2. Perf & Sqz 50 sx cmt @ 2647-2447'. WOC & Tag. (7" shoe & top of liner). 3. Perf & Sqz 80 sx cmt @ 1000-800'. WOC & Tag. (B/Salt) 4. Perf & Sqz 80 sx cmt @ 412-200'. WOC & Tag. (8 5/8" Shoe, T/Salt) 5. Perf & Sqz 30 sx cmt @ 60'-Surface. 6. Cut off well head, verify cmt to surface. weld on Below Ground Dry Hole Marker. RECLAMATION PROCEDURE									
Below ground	level day	ATTA	ACHED	in ne	za: cad				
	Electronic Submission #	PERATING LI	.C, sent to the Ca	rlsbad	•				
Signature (Electronic S	Date 02/02/20)18							
	THIS SPACE FO	R FEDERA	L OR STATE (OFFICE U	SE				
Approved By	C. ames_		Title Say	av. A	ST	2-21-18 Date			
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to conduct the conduction of t	iitable title to those rights in the		Office Carl	Shad					
m a 1011/000 0 a 1001 1m 44	11000 1010 1			1110 11 .		C			

COG Operating, LLC

Lease & Well # Burch Keely Unit 72 3001503057 Sec 23 A T 17S R 29E, 2880 FSL & 855 FWL Spud date 3-1-38 EDDY CO., NM Completion date 3-8-39 Elevation - 3595 Calculated TOC 8' 10" hole 8 5/8" @ 362, Cmt w50 sx. Casing cementing calculations 8 5/8" 28# casing 10" Surface hole Cement volume. = 50 X 1.32 CF/SK = 66 cu. Ft. slurry 66 - 25% slurry loss for shoe joint & hole loss = 49.5 CF 49.5 CF X ann, Vol. of 7 1594 FT/CF = 354' 362 - 354 =8' estimated (calculated) top of cement. 7" 224# casing 8 1/4" hole Calculated TOC @ 1845'. Cement volume = 75 X 1.32 CF/SK = 99 cu.ft. slurry. 99 - 20% slurry loss for shoe joint & hole loss = 79.2 CF 79.2 CF X ann. Vol. of 9.6182 FT/CF =752' 2597 - 752 = 1845 estimated (calculated) top of cement. 5 1/2" 17# liner 6 1/4" Hole TOC 2810 from temp survey. 7" PC R-4 tension pkr @ 2310' 2 38" IPC tbg. 5 1/2" csg free pointed & backed off @ 2546', October 1964. 7" csg @ 2597'. Cmt w/75 sx TOC @ 2810', Temp Survey Original completion OH 2732 - 2899' Shot w/100 qts. 3-39 First water injection 4/I4/66 cmt w/35 sx Cl H TOC @ 2810' Temp. sur 32.8207283 51/2" liner @ 3237', top @ 2546' (backed off) Acidized w/1,000 gal 20%, frac w/402 bbl crude w/32,000# sd. -164 0512543 TD @ 3319 IP 441 BOD 3/11/1956

COG Operating, LLC

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10" hole

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3 5 2

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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.

- 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