

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
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 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. NMLC028793C
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
3a. Address 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79701		7. If Unit or CA/Agreement, Name and/or No NMNM88525X
3b. Phone No. (include area code) Ph: 432-685-4384		8. Well Name and No. BURCH KEELY UNIT 18 FEDERAL 2H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T17S R30E Lot 1 1152FNL 497FWL		9. API Well No. 30-015-39573-00-X1
		10. Field and Pool, or Exploratory GRAYBURG JACKSON
		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 checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Deepen
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Alter Casing
	<input type="checkbox"/> Fracture Treat
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Change Plans
	<input type="checkbox"/> Plug and Abandon
	<input type="checkbox"/> Convert to Injection
	<input type="checkbox"/> Plug Back
	<input type="checkbox"/> Production (Start/Resume)
	<input type="checkbox"/> Reclamation
	<input type="checkbox"/> Recomplete
	<input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Water Disposal
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Well Integrity
	<input checked="" type="checkbox"/> Other Change to Original APD

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 recompleate 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 recompleation 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.)

COG proposes to downsize from 8 3/4" hole to 7 7/8" hole at 5123' MD and drill a 7 7/8" lateral to 9015' MD. 5 1/2" 17# L-80 casing from surface to 9015' MD with isolation packers in the lateral portion of the hole. A stage packer tool will be installed in the 5 1/2" string at kick off point at approximately 4373' MD. The packers will be set and the DV tool opened. The 5 1/2" pipe will be cemented from 4373' MD to surface with: LEAD SLURRY: 500 sx35:65:6:C:Poz:Gel w/5% salt, 5 pps LCM, .2% SMS, .3% FL-52A, .125 pps CF, 2.01 yd. TAIL SLURRY: 400 sx50:50:2:C:Poz:Gel w/5% salt, 3pps LCM, .6% SMS, 1% FL-25, 1% BA-58, .125 pps CF, .3% FL-52A; 1.37 yield.

All other components of the cement program will remain the same.

RECEIVED
MAR 28 2012
NMOCD ARTESIA**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****Accepted for record**
NMOCD 10/5/2012

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #132885 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 03/14/2012 (12DLM0779SE)	
Name (Printed/Typed) KELLY J HOLLY	Title PERMITTING TECH
Signature (Electronic Submission)	Date 03/13/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By TED MORGAN	Title PETROLEUM ENGINEER	Date 03/22/2012
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 ****

Burch Keely Unit Federal 18 2H
COG Operating LLC
30-015-39573
March 22, 2012
Conditions of Approval

Summary of Current Status:

- APD Approved with Drainhole TD (DHTD) at 9015' MD.
- 13-3/8" x 9-5/8" x 5-1/2" casing program with 17-1/2" x 12-1/4" x 8-3/4" hole sizes

Sundry dated 3/13/2012:

ORIGINAL PLAN
5-1/2" casing in 8-3/4" hole

REVISED PLAN
8-3/4" hole to 5123'. 7-7/8" lateral hole to TD.

Cement 5-1/2" casing from TD to Surface Run 5-1/2" casing with stage packer at 4373'
(top Glorieta at approximately 4300')

Cement 5-1/2" casing in the drainhole Utilize 5-1/2" x 7-7/8" isolation packers on the
5-1/2" casing in uncemented drainhole

Conditions of Approval:

The previous engineering COA dated 10/26/2011 shall remain applicable, with the following inclusions.

1. Setting depth for the 5-1/2" x 8-3/4" packer tool shall be at or below the top of the Glorieta Formation, estimated at 4300' MD. (This packer tool setting depth is currently stated at 4373' MD, corresponding to the Kick off point for drilling the lateral. The packer tool setting depth must ensure good cement exists above the top of the Glorieta.)
2. TOC for 5-1/2" casing will be to surface as described in Original APD. Operator is responsible to confirm TOC. If cement does not circulate to surface, the Operator is to call the BLM. Operator is responsible to have a remedial cementing plan if one is needed.
3. The record of the drilling rate along with the GR/N well log run in the vertical portion of hole shall 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.