

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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.*5. Lease Serial No.  
NMNM121474

6. BLM Permittee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

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

8. Well Name and No.  
COPPERHEAD 31 FEDERAL COM 3H

9. API Well No.

30-015-43924

10. Field and Pool, or Exploratory  
WILDCAT  
WOLFCAMP

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"/> 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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 recompleat 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 recompleat 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 Production LLC, respectfully requests approval for the following changes to the original approved APD.

Operator has drilled 18.125' hole to 414' w/ 8.4 ppg fresh water spud mud. Ran 16' 75# J55 BTC casing to TD and cemented with 400 Class C + 2% CaCl ( 14.8 ppg, 1.34 yd) to surface. Circulated 124 sx to surface.

Operator has drilled 13.5' hole to 2,801' w/ 10 ppg brine water. Ran 10-3/4' 45.5# N80 BTC casing to TD and cemented with 1000 sx Class C + 4% Gel lead ( 13.5 ppg, 1.73 yd) and 250 sx Class C tail ( 14.8 ppg, 1.34 yd). Circulated 275 sx to surface.

Operator has drill 9-7/8' hole to 10,015' with 9.0 ? 9.3 ppg cut brine. Ran 7-5/8' 29.7# P110 BTC

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

NOV 22 2016

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

RECEIVED

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #357921 verified by the BLM Well Information System For COG PRODUCTION LLC, sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 11/15/2016 (17DLM0290SE)	
Name (Printed/Typed) MAYTE X REYES	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 11/14/2016

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <u>MUSTAFA HAQUE</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>11/16/2016</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</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 \*\***

## **Additional data for EC transaction #357921 that would not fit on the form**

### **32. Additional remarks, continued**

casing to TD. Cemented with 1050 sx 50:50:10 H Blend lead ( 11.9 ppg, 2.5 yd) and 275 sx Class H ( 16.4 ppg, 1.1 yd). Circulated red dye to surface, but did not circulate cement. Ran temperature survey 6 hours after cement job. Temperature survey is attached and estimated top of cement at 2,580?.

Operator will drill 6-3/4? vertical / curve to 11,000? with 9.0 ? 9.6 ppg cut brine. Operator will drill 6-3/4? lateral to 17,510? with an 11.0 -13.0 ppg oil based mud. Run 5-1/2? 23# P110 BTC by 5? 18# P110 BTC tapered casing to TD. Pump 400 sx 50:50:10 H Blend lead ( 11.9 ppg, 2.5 yd) and 950 sx 50:50:2 H Blend tail ( 14.4 ppg, 1.25 yd) as per original APD.

Temperature survey attached.

**PECOS DISTRICT  
DRILLING OPERATIONS  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	COG Production, LLC
LEASE NO.:	NMNM121474
WELL NAME & NO.:	3H-Copperhead 31 Federal Com
SURFACE HOLE FOOTAGE:	349'N & 773'E
BOTTOM HOLE FOOTAGE	50'S & 660'E
LOCATION:	Section 30, T.26 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

**All previous COAs still apply except for the following:**

**If cement does not circulate to surface on the intermediate casing, the cement on the production casing must come to surface.**

1. The minimum required fill of cement behind the **10 3/4** inch first intermediate casing is:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

2. The minimum required fill of cement behind the **7 5/8** inch second intermediate casing is:

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

**Formation below the 7 5/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.**

**MHH 11162016**