

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. NMNM67106
2. Name of Operator COG OPERATING LLC Contact: MAYTE X REYES E-Mail: mreyes1@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 575-748-6945	7. If Unit or CA/Agreement, Name and/or No. NMNM124833
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 12 T24S R31E SWSW 330FSL 430FWL 32.225422 N Lat, 103.738193 W Lon		8. Well Name and No. HOOFPRIINT FEDERAL COM 1H
		9. API Well No. 30-015-41620-00-X1
		10. Field and Pool, or Exploratory MESA VERDE
		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 <input type="checkbox"/> Change to Original APD
	<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.)

COG Operating LLC, respectfully requests approval for the following drilling changes to the original approved APD.

*your APD is for 7-7/8" hole*  
We want to drill the vertical/curve from intermediate at 4550? to End of Curve at 8606? MD / 8330? TVD with 8-3/4" hole size. Directional Plan ? No Change from APD plan submission.  
In the lateral (8606? MD / 8330? TVD to 12,748? MD / 8300? TVD), we want to reduce hole size from 8-3/4" to 7-7/8" to TD (12,748? MD / 8,300? TVD).

We want to modify our production casing cementing plan to utilize the Halliburton Tune Light system and to adjust cementing volumes in the Lateral and Vertical Sections to optimize the hydrostatic loading of the cement column to avoid losses in the Brushy Canyon and circulate cement at least to a minimum of 500? inside the 9-5/8" casing (minimum TOC ? 4050?), however, volumes are designed to circulate to 2550? (2000? of tie-in above ICP casing shoe at 4550?). As before, this will be a

*already have  
7-7/8" hole.  
Cement change  
is approved.*

NM OIL CONSERVATION  
ARTESIA DISTRICT

OCT 20 2014

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #270797 verified by the BLM Well Information System

For COG OPERATING LLC, sent to the Carlsbad

Committed to AFMSS for processing by JENNIFER MASON on 10/14/2014 (15JAM0019SE)

Name (Printed/Typed) MAYTE X REYES

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/14/2014

RECEIVED  
Accepted for recordNMOC DTS  
10/20/14

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

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

BUREAU OF LAND MANAGEMENT

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 #270797 that would not fit on the form

### 32. Additional remarks, continued

single stage cementing program.

Tail Cementing volumes (VersaCem H @ 14.4 ppg) proposed below are intended to place the tail cement through the lateral section of the well (12,748? MD / 8300? TVD) and up into the curve to approximately 7852? MD / ~7852? TVD.

Lead Cementing volumes (Halliburton Tune Light @ 10.4 ppg) proposed below are intended to place the Lead Cement from 7852? to a depth of 2550? which would be bring the top of the cement approximately 2000? above the 9-5/8? intermediate casing shoe at 4550? (500? minimum tie back required).

Fluid caliper(s) will be ran at TD and at ~7852? to verify cementing volumes for the lateral and curve/vertical sections of this well.

Additional cement volumes may be added if wellbore losses or seepage is detected.

#### Proposed Cementing Program

Lead : 500 sx of Halliburton Tune Light at 10.4 ppg ? / 19.06 gal/sx / 3.32 cf/sk)  
(Note: Density/Yield of Tune Light Cement at Downhole Conditions)

Tail: 850 sx of Versacem H + 0.4% GasStop + 0.3% CFR-3 + 1% Salt + 1% HR-601  
(14.4 ppg ? 5.7 gal/sk 1.24 cf/sk)

#### Summary of Volume Calculations by Section

##### Lead Cement

Lead: 2550? ? 4550?(inside 9-5/8?Intermediate to 2550?) 5% Excess

Lead : 165 sx of Halliburton Tune Light (10.4 ppg @ Bottom Hole Conditions ? / 19.07 gal/sk / 3.32 cf/sk)

Lead: 4550? ? 7852? (ICP Shoe to KOP ? 8-3/4? Bit) 30% Excess

Lead: 327 sx of Halliburton Tune Light (10.4 ppg ? / 19.07 gal/sk / 3.32 cf/sk)

Total Lead: 491 sx >>> 500 sx.

##### Tail Cement

Tail: 7852? (KOP) ? 8606? MD (End of Curve) ? 8-3/4? Bit 15% Excess

Tail: 176 sx of Versacem H + 0.4% GasStop + 0.3% CFR-3 + 1% Salt + 1% HR-601 (14.4 ppg ? 5.7 gal/sk 1.24 cf/sk)

Tail: 8606? MD (End of Curve) to 12,748? MD/8300? TVD

(Change Bit Size to 7-7/8?) 15% Excess

Tail: 665 sx of Versacem H + 0.4% GasStop + 0.3% CFR-3 + 1% Salt + 1% HR-601 (14.4 ppg ? 5.7 gal/sk 1.24 cf/sk)

Total Tail: 840 sx. >>> 850 sx

Note: The excess adjustments are based on the fluid caliper results and excess cement returns observed on offset wells and the recently drilled Corvo Fed 2H and Corvo 4H. A fluid caliper will be run on this well (Hoofprint Fed 1H) and adjustments to these cited volumes may be requested.