

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.

5. Lease Serial No.
NMNM120895

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
PATRON 23 FEDERAL 2H

2. Name of Operator **COG PRODUCTION LLC**
Contact: **MAYTE X REYES**
E-Mail: **mreyes1@concho.com**

9. API Well No.
30-015-42449-00-X1

3a. Address
2208 W MAIN STREET
ARTESIA, NM 88210

3b. Phone No. (include area code)
Ph: 575-748-6945

10. Field and Pool, or Exploratory
CORRAL DRAW

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 23 T25S R29E NENW 322FNL 2085FWL
32.121752 N Lat, 103.956513 W Lon

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 checked="" 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 PD
	<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 Production LLC, respectfully requests approval for the following changes to the original approved APD.

Accepted for record
JRD NMOC 4/16/15

While drilling the 12-1/4? intermediate hole, we have encountered a severe loss circulation zone starting at 994?. Drilling has continued without returns. Currently the 13-3/8? surface casing is set at 854?. The 12-1/4? intermediate hole section will be drilled to 3260? at which time the 9-5/8? intermediate casing string will be ran and cemented. We propose that this well be cemented in 2 Stages with an External Casing Packer/Stage Tool set above the initial loss zone. Given the time it has taken to drill this interval, we anticipate hole washout higher than normal. Without circulation we cannot run a fluid caliper to verify annular volumes. Therefore we have increased our typical excess factors and Average Open Hole Size assumptions. Note that although we

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 23 2014

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

Electronic Submission #285501 verified by the BLM Well Information System

For COG PRODUCTION LLC, sent to the Carlsbad

Committed to AFMSS for processing by JENNIFER MASON on 12/17/2014 (15JAM0131SE)

RECEIVED

Name (Printed/Typed) **MAYTE X REYES**

Title **REGULATORY ANALYST**

Signature (Electronic Submission)

Date **12/17/2014**

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

DEC 17 2014

Date

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
CARLSBAD FIELD OFFICE

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 #285501 that would not fit on the form

32. Additional remarks, continued

have assumed an average open hole size of 22", we do not believe that hole washout is that severe, however, given the losses we have encountered, we believe this basis of volume calculation is prudent.

Additionally, with the increased anticipated washout, we request that to ensure the External Casing Packer establishes an effective seal to allow the 2nd Stage Cement to circulate to surface, that we be allowed to set the ECP inside the 13-3/8" casing at a depth of approximately ~~800'~~ **NO**

If the BLM will not allow us to set the ECP/Stage Tool inside the 13-3/8" casing, we then propose to set the ECP at least 50' below the 13-3/8" casing shoe which is at 854'.

The following cement program is proposed

1st Stage

1st Lead: 1800 sx HLC 65:35:6 + 3# Kelseal + 5% Salt + 0.125 pps Pol-E-Flake at 12.7

ppg/1.98 cf/sx/10 gal/sx

2nd Lead: 900 sx Class C + 4% Gel + 1% CaCl₂ at 13.5 ppg/1.75 cf/sx/9.2 gal/sx

Tail: 300 sx Class C + 2% CaCl₂ at 14.8 ppg/1.34 cf/sx/6.35 gal/sx

Volumes Calculated based on assumed 22" Average Open Hole Size (500% Excess)

2nd Stage

Lead: 300 sx Class Class C + 4% Gel + 1% CaCl₂ at 13.5 ppg/1.75 cf/sx/9.2

gal/sx

Tail: 200 sx Class C + 2% CaCl₂ at 14.8 ppg/1.34 cf/sx/6.35 gal/sx

Volumes Calculated on assumed 22" Average Open Hole Size from 925' to 854' (500% excess) and 5% excess between 13-3/8" and 9-5/8" casing from 854' to surface.

Below

**PECOS DISTRICT
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	COG Production LLC
LEASE NO.:	NMNM-120895
WELL NAME & NO.:	Patron 23 Federal 2H
SURFACE HOLE FOOTAGE:	0322' FNL & 2085' FWL
BOTTOM HOLE FOOTAGE:	0330' FSL & 1980' FWL
LOCATION:	Section 23, T. 25 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico
API:	30-015-42449

The original COAs still stand with the following drilling modifications:

Medium Cave/Karst

Possibility of water flows in the Canyon, Ellenburger, and Precambrian.

Possibility of lost circulation in the Ellenburger.

1. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Operator has proposed DV tool at depth of 904', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe.

- a. First stage to DV tool:

Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage:

- b. Second stage above DV tool:

Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

JAM 121714