Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
Operator Copy

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

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 page 2

5. Lease Serial No.
NMNM136223

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
PITCHBLENDE FED 19-30 038H

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

9. API Well No.
30-025-45653-00-X1

3a. Address
ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-4287

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

10. Field and Pool or Exploratory Area
WILDCAT BONE SPRING

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 19 T25S R35E 450FNL 710FEL
32.121914 N Lat, 103.400383 W Lon

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original A PD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 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.

COG Operating respectfully requests approval for the following changes to the originally approved APD.

Casing Changes:
See attached.

Formation Change:
From: Doggie Draw; Delaware 97779
To: Wildcat; Bone Spring
C102 attached.

All other previous Conditions of Approval still apply. DR

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

Electronic Submission #499079 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 01/16/2020 (20PP0980SE)

Name *(Printed/Typed)* MAYTE X REYES — Title SENIOR REGULATORY ANALYST

Signature (Electronic Submission) — Date 01/14/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By DYLAN ROSSMANGO — Title PETROLEUM ENGINEER — Date 01/16/2020

Conditions of Approval 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 Hobbs

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Pitchblende Fed Com 19-30 38H

Casing and BOP

Interval	Hole Size	Casing Interval		Csg. Size	Weight	Grade	Conn.	BOP
		From	To		(lbs)			
Surface	14.5"	0	1010	10.75"	45.5	J55	BTC	
Intermediate	9.875"	0	8500	7.625"	29.7	L80 HC	BTC	5M
	8.75"	8300*	11850	7.625"	29.7	P-110 HC	Tech Lock Flush Joint	
Production	6.75"	0	11650	5.5"	23	P110	BTC	10M w/ 5M annular**
	6.75"	11650	20,075	5"	18	P110	BTC	

The Tech Lock Flush Joint by BTC cross over will be 200' above where the bit size changes from 9.875" to 8.75"

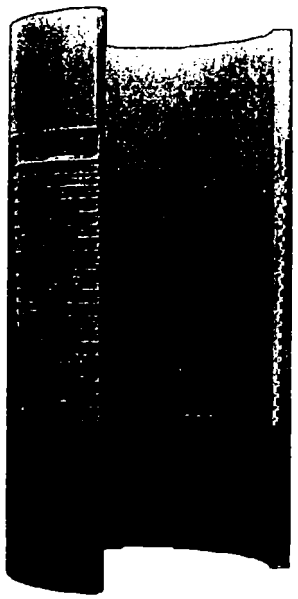
5M annular variance requested; 5M annular will be tested to 5000psi

Cement:

Surface
Lead: 300 sx 13.5#; 1.75 cuft/sx; 9.21 H20 Gal/sx; Class C + 4% Gel
Tail: 300 sx 14.8#; 1.34 cuft/sx; 6.34 H20 Gal/sx; Class C + 2% CaCl2

Intermediate
Lead: 875 sx 10.3#; 3.6 cuft/sx; 21.87 H20 Gal/sx; NeoCem
Tail: 150 sx 16.4#; 1.1 cuft/sx; 6.0 H20 Gal/sx; Class H

Production
Lead: 650 sx; 12.7#; 1.97 cuft/sx; 10.8 H20 Gal/sx; 35:65:6 H Blend
Tail: 985 sx; 14.5#; 1.22 cuft.sx; 5.56 H20 Gal/sx; 50:50:2 H Blend



TEC-LOCK FJ

7.625" 29.7 LB/FT (.375" Wall)
P110 HC

Pipe Body Data

Nominal OD:	7.625	in
Nominal Wall:	0.375	in
Nominal Weight:	29.70	lb/ft
Plain End Weight:	29.22	lb/ft
Material Grade:	P110 HC	
Mill/Specification:	BORUSAN MANNESMANN	
Yield Strength:	110,000	psi
Tensile Strength:	125,000	psi
Nominal ID:	6.875	in
API Drift Diameter:	6.750	in
Special Drift Diameter:	NA	in
RBW:	87.5%	
Body Yield:	940,000	lbf
Burst:	9,460	psi
Collapse:	7,050	psi

Connection Data

Standard OD:	7.625	in
Pin Bored ID:	6.875	in
Critical Section Area:	6.299	in²
Tensile Efficiency:	70.0%	
Compressive Efficiency:	61.9%	
Longitudinal Yield Strength:	868,000	lbf
Compressive Limit:	581,860	lbf
Internal Pressure Rating:	9,570	psi
External Pressure Rating:	7,050	psi
Maximum Bend:	26	°/100ft

Operational Data

Minimum Makeup Torque:	3,600	ft*lbf
Optimum Makeup Torque:	6,500	ft*lbf
Maximum Makeup Torque:	9,400	ft*lbf
Minimum Yield:	14,500	ft*lbf
Makeup Loss:	5.97	in

Notes Preliminary DataSheet

The Connection ratings are structural

HUNTING

Generated on Sep 05, 2019

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-45653		WILDCAT; BONE SPRING

Property Code	Property Name	Well Number
	PITCHBLENDE FEDERAL 19-30	38H

OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3329.9'

Surface Location

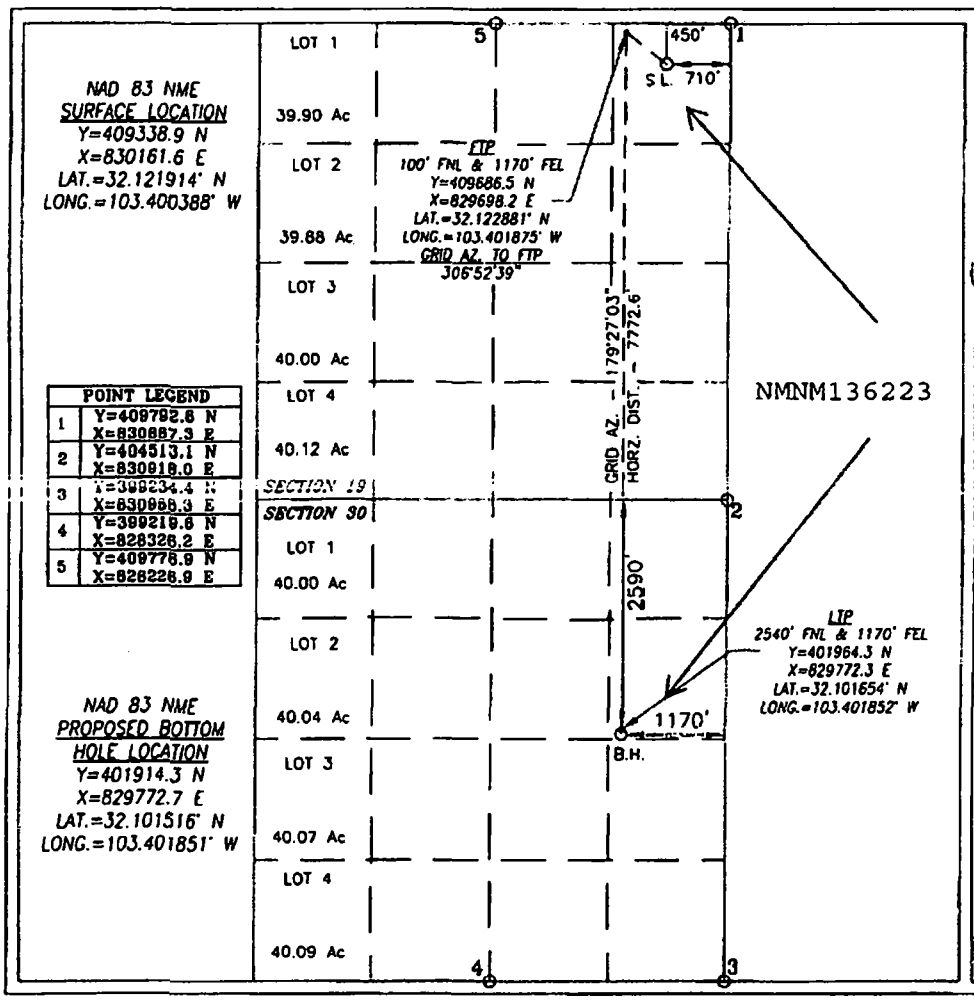
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	25-S	35-E		450	NORTH	710	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	30	25-S	35-E		2590	NORTH	1170	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Mayte Reyes 1-9-2020
Signature Date

Mayte Reyes
Printed Name

mreyes1@concho.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 5, 2019
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 12/20/19

Certificate No. CHAD HARCROW 17777

W.O. # 19-2290 DRAWN BY: DS

PECOS DISTRICT
DRILLING OPERATIONS
CONDITIONS OF APPROVAL EC499079

OPERATOR'S NAME:	**COG Operating LLC**
LEASE NO.:	**NMNM136223**
WELL NAME & NO.:	**Pitchblende Fed 19-30 38H**
SURFACE HOLE FOOTAGE:	**450' FNL & 710' FEL**
BOTTOM HOLE FOOTAGE	**2590' FNL & 1170' FEL**
LOCATION:	**Section 19, T 25S, R 35E, NMPM**
COUNTY:	**Lea County, New Mexico**

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Variance	◉ None	◉ Flex Hose	○ Other
Wellhead	◉ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit

A. CASING

1. The **10-3/4"** surface casing shall be set at approximately **1010'** (a minimum of 25' into the Rustler Anhydrite and above the salt) and cemented to surface.
   a. **If cement does not circulate to surface,** the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of **6 hours** after pumping cement, ideally between 8-10 hours after.
   b. WOC time for a primary cement job will be a minimum of **8 hours** or **500 psi** compressive strength, whichever is greater. This is to include the lead cement.
   c. If cement falls back, remedial cementing will be done prior to drilling out the shoe.
   d. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 psi compressive strength, whichever is greater.
2. The **7-5/8"** intermediate casing shall be cemented to surface.
   a. **If cement does not circulate to surface,** see A.1.a, c & d.
   b. This casing must be kept at least 1/3 full at all times in order to meet BLM collapse requirements.
3. The **5-1/2" and 5"** production casing shall be cemented with at least **200' tie-back** into the previous casing. Operator shall provide method of verification.

B. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **10,000 (10M)** psi. **Variance approved to use a 5M annular. When conducting a BOP/BOPE testhe annular shall be tested to 70% of the working pressure.**
3. Required safety valves, with appropriate wrenches and subs for the drill string being utilized, will be in the open position and accessible on the rig floor.

DR 1/16/2020