

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTEMNRD-OCD ARTESIA  
REC'D: 7/1/2020FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other				5. Lease Serial No. NMNM54398	
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____				6. If Indian, Allottee or Tribe Name	
2. Name of Operator COG OPERATING LLC				8. Lease Name and Well No. HOWITZER FEDERAL COM 606H	
3. Address 600 W ILLINOIS AVENUE MIDLAND, TX 79701				9. API Well No. 30-015-45834-00-S1	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 12 T24S R28E Mer NMP At surface SENE 2155FNL 300FEL 32.233739 N Lat, 104.033260 W Lon Sec 12 T24S R28E Mer NMP At top prod interval reported below SENE 2155FNL 300FEL 32.233739 N Lat, 104.033260 W Lon Sec 11 T24S R28E Mer NMP At total depth SWNW 2281FNL 206FWL 32.233539 N Lat, 104.066255 W Lon				10. Field and Pool, or Exploratory PURPLE SAGE-WOLFCAMP (GAS)	
14. Date Spudded 05/19/2019				11. Sec., T., R., M., or Block and Survey or Area Sec 12 T24S R28E Mer NMP	
15. Date T.D. Reached 08/20/2019				12. County or Parish EDDY	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 01/19/2020				13. State NM	
17. Elevations (DF, KB, RT, GL)* 2963 GL					
18. Total Depth: MD 19945 TVD 9633		19. Plug Back T.D.: MD 19766 TVD 9633		20. Depth Bridge Plug Set: MD 19854 TVD 9633	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 2963 GL				22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)	

## 23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
8.500	5.500								
26.000	20.000 J55	94.0		312		1000		0	
17.500	13.375 J55	61.0		2713		2125		0	
12.250	9.625 L80	47.0		9050		1750		0	
8.500	5.500 P110	20.0		19899		4475		0	

## 24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	9145	9135						

## 25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	9925	19771	9925 TO 19771		1600	OPEN
B)						
C)						
D)						

## 26. Perforation Record

## 27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9925 TO 19771	SEE ATTACHED INFORMATION

## 28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
01/24/2020	01/24/2020	24		133.0	1485.0	286.0			GAS LIFT
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
18/64	SI 2450	1150.0		133	1485	286		PGW	

## 28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
SI									

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #504037 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

28b. Production - Interval C									
Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D									
Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(*Sold, used for fuel, vented, etc.*)  
**SOLD**

30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.	31. Formation (Log) Markers
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Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
RUSTLER	407			RUSTLER	407
TOP SALT	967			TOP SALT	967
BASE OF SALT	2497			BASE OF SALT	2497
LAMAR	2696			LAMAR	2696
BELL CANYON	2754			BELL CANYON	2754
CHERRY CANYON	3640			CHERRY CANYON	3640
BRUSHY CANYON	4873			BRUSHY CANYON	4873
BONE SPRING LIME	6447			BONE SPRING LIME	6447

32. Additional remarks (include plugging procedure):  
 AVALON 7147  
 FIRST BONE SPRING 7420  
 SECOND BONE SPRING 8217  
 THIRD BONE SPRING 9285  
 WOLFCAMP 9718

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)	2. Geologic Report	3. DST Report	4. Directional Survey
5. Sundry Notice for plugging and cement verification	6. Core Analysis	7 Other:	

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #504037 Verified by the BLM Well Information System.**  
**For COG OPERATING LLC, sent to the Carlsbad**  
**Committed to AFMSS for processing by VIOLETA BURKE on 06/09/2020 (20VB0285SE)**

Name(*please print*) AMANDA AVERY Title REGULATORY ANALYST

Signature \_\_\_\_\_ (Electronic Submission) Date 02/21/2020

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.

## Revisions to Operator-Submitted EC Data for Well Completion #504037

	Operator Submitted	BLM Revised (AFMSS)
Lease:	NMNM54398	NMNM54398
Agreement:		
Operator:	COG OPERATING LLC 2208 W MAIN STREET ARTESIA, NM 88210 Ph: 575-748-6940	COG OPERATING LLC 600 W ILLINOIS AVENUE MIDLAND, TX 79701 Ph: 432.685.4385
Admin Contact:	AMANDA AVERY REGULATORY ANALYST E-Mail: aavery@concho.com  Ph: 575-748-6940	AMANDA AVERY REGULATORY ANALYST E-Mail: aavery@concho.com  Ph: 575-748-6940
Tech Contact:	AMANDA AVERY REGULATORY ANALYST E-Mail: aavery@concho.com  Ph: 575-748-6940	AMANDA AVERY REGULATORY ANALYST E-Mail: aavery@concho.com  Ph: 575-748-6940
Well Name: Number:	HOWITZER FEDERAL COM 606H	HOWITZER FEDERAL COM 606H
Location:		
State:	NM	NM
County:	EDDY	EDDY
S/T/R:	Sec 12 T24S R28E Mer NMP	Sec 12 T24S R28E Mer NMP
Surf Loc:	SENE Lot H 2155FNL 300FEL 32.233739 N Lat, 104.033260 W Lon	SENE Lot H 2155FNL 300FEL 32.233739 N Lat, 104.033260 W Lon
Field/Pool:	PURPLE SAGE; WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Logs Run:		2963 GL
Producing Intervals - Formations:	WOLFCAMP	WOLFCAMP
Porous Zones:	RUSTLER TOP OF SALT BOTTOM OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIMESTONE	RUSTLER TOP SALT BASE OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIME
Markers:	RUSTLER TOP OF SALT BOTTOM OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIMESTONE	RUSTLER TOP SALT BASE OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIME