

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 602H	
3. Address 600 W ILLINOIS AVENUE MIDLAND, TX 79701				9. API Well No. 30-015-45831-00-S1	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 12 T24S R28E Mer NMP At surface NENE 1014FNL 620FEL 32.236874 N Lat, 104.034304 W Lon Sec 12 T24S R28E Mer NMP At top prod interval reported below NENE 1014FNL 620FEL 32.236874 N Lat, 104.034304 W Lon Sec 11 T24S R28E Mer NMP At total depth NWNW 678FNL 201FWL 32.237947 N Lat, 104.066275 W Lon				10. Field and Pool, or Exploratory PURPLE SAGE-WOLFCAMP (GAS)	
14. Date Spudded 04/20/2019				15. Date T.D. Reached 06/26/2019	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 11/23/2019				17. Elevations (DF, KB, RT, GL)* 2975 GL	
18. Total Depth: MD 20139 TVD 9889		19. Plug Back T.D.: MD 20048 TVD 9889		20. Depth Bridge Plug Set: MD 20057 TVD 9889	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) 2975 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
26.000	20.000 J55	94.0	0	315		650		0	
17.500	13.375 J55	61.0	0	2715		1500		0	
8.500	5.500 P110	20.0	0	4350		4350		0	
12.250	9.625 L80	47.0	0	9295		1600		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	9421	9411						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	10200	20032	10200 TO 20032		1600	OPEN
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
10200 TO 20032	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
01/20/2020	01/20/2020	24	→	420.0	1967.0	4529.0			GAS LIFT
Choke Size	Tbg. Press. Flwg. 1700 SI	Csg. Press. 1500.0	24 Hr. Rate →	Oil BBL 420	Gas MCF 1967	Water BBL 4529	Gas:Oil Ratio	Well Status 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. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

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

ELECTRONIC SUBMISSION #503749 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	477			RUSTLER	477
TOP SALT	981			TOP SALT	981
BASE OF SALT	2529			BASE OF SALT	2529
LAMAR	2714			LAMAR	2714
BELL CANYON	2751			BELL CANYON	2751
CHERRY CANYON	3638			CHERRY CANYON	3638
BRUSHY CANYON	4866			BRUSHY CANYON	4866
BONE SPRING LIME	6444			BONE SPRING LIME	6444

32. Additional remarks (include plugging procedure):
 AVALON 7111
 FIRST BONE SPRING 7428
 SECOND BONE SPRING 8227
 THIRD BONE SPRING 9334
 WOLFCAMP 9690

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 #503749 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 (20VB0282SE)

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

Signature _____ (Electronic Submission) Date 02/19/2020

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 #503749

	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 602H	HOWITZER FEDERAL COM 602H
Location:		
State:	NM	NM
County:	EDDY	EDDY
S/T/R:	Sec 12 T24S R28E Mer NMP	Sec 12 T24S R28E Mer NMP
Surf Loc:	NENE Lot A 1014FNL 620FEL 32.236874 N Lat, 104.034304 W Lon	NENE Lot A 1014FNL 620FEL 32.236874 N Lat, 104.034304 W Lon
Field/Pool:	PURPLE SAGE; WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Logs Run:		2975 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