

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM108973

1a. Type of Well Oil Well Gas Well Dry Other

b. Type of Completion New Well Work Over Deepen Plug Back Diff. Resvr.
Other _____

2. Name of Operator **COG OPERATING LLC** Contact: **AMANDA AVERY**
E-Mail: **aavery@concho.com**

3. Address **ONE CONCHO CENTER 600 W ILLINOIS AVENUE** 3a. Phone No. (include area code)
MIDLAND, TX 79701-4287 Ph: **575-748-6940**

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface **Sec 2 T26S R32E Mer NMP**
SESW 375FSL 1910FWL 32.066040 N Lat, 103.648079 W Lon
At top prod interval reported below **Sec 2 T26S R32E Mer NMP**
SESW 375FSL 1910FWL 32.066040 N Lat, 103.648080 W Lon
At total depth **Sec 35 T25S R32E Mer NMP**
NENW 51FNL 2300FWL 32.094113 N Lat, 103.646810 W Lon

6. If Indian, Allottee or Tribe Name _____

7. Unit or CA Agreement Name and No. _____

8. Lease Name and Well No.
HARRIER FEDERAL COM 301H

9. API Well No.
30-025-45832-00-S1

10. Field and Pool, or Exploratory
JENNINGS

11. Sec., T., R., M., or Block and Survey
or Area **Sec 2 T26S R32E Mer NMP**

12. County or Parish
LEA

13. State
NM

14. Date Spudded
06/28/2019

15. Date T.D. Reached
11/01/2019

16. Date Completed
 D & A Ready to Prod.
05/13/2020

17. Elevations (DF, KB, RT, GL)*
3253 GL

18. Total Depth: MD **19779** TVD **9563**

19. Plug Back T.D.: MD **19618** TVD **9563**

20. Depth Bridge Plug Set: MD **19646** TVD **9563**

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) _____

22. Was well cored? No Yes (Submit analysis)
Was DST run? No Yes (Submit analysis)
Directional Survey? No 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
17.500	13.375 J55	54.5	0	855		725		0	
12.250	9.625 J55	40.0	0	4619		1050		0	
8.750	5.500 P110	17.0	0	19762	8873	4105		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	9007	8997						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING UPPER			9852 TO 19556		1044	OPEN
B) BONE SPRING	9852	19556				
C)						
D)						

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

Depth Interval	Amount and Type of Material
9852 TO 19556	77389 7 1/2%, 19,600,180# SAND; 21,298,632 GAL FLUID

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
06/14/2020	06/14/2020	24	→	63.0	445.0	2280.0			GAS LIFT
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
14/64	SI 1020	924.0	→	63	445	2280	7063	POW	

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
06/14/2020	06/14/2020	24	→	63.0	445.0	2280.0			GAS LIFT
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
14/64	SI 1020	924.0	→	63	445	2280		POW	

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

ELECTRONIC SUBMISSION #522745 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

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
RUSTLER	644			RUSTLER	644
TOP OF SALT	1037			TOP OF SALT	1037
BASE OF SALT	4372			BASE OF SALT	4372
LAMAR	4602			LAMAR	4602
BELL CANYON	4648			BELL CANYON	4648
CHERRY CANYON	5625			CHERRY CANYON	5625
BRUSHY CANYON	7275			BRUSHY CANYON	7275
BONE SPRING 2ND	8824			BONE SPRING 2ND	8824

32. Additional remarks (include plugging procedure):

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 #522745 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 08/04/2020 (20JAS0156SE)**

Name (please print) AMANDA AVERY Title REGULATORY ANALYST

Signature (Electronic Submission) Date 07/23/2020

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 #522745

	Operator Submitted	BLM Revised (AFMSS)
Lease:	NMNM108973	NMNM108973
Agreement:		
Operator:	COG OPERATING LLC 2208 W MAIN STREET ARTESIA, NM 88210 Ph: 575-748-6940	COG OPERATING LLC ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701-4287 Ph: 432.685.4342
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:	HARRIER FEDERAL COM 301H	HARRIER FEDERAL COM 301H
Location:		
State:	NM	NM
County:	LEA	LEA
S/T/R:	Sec 2 T26S R32E Mer NMP	Sec 2 T26S R32E Mer NMP
Surf Loc:	SESW Lot N 375FSL 1910FWL 32.066040 N Lat, 103.648079 W Lon	SESW Lot N 375FSL 1910FWL 32.066040 N Lat, 103.648079 W Lon
Field/Pool:	JENNINGS UPPER BS SHALE	JENNINGS
Logs Run:		
Producing Intervals - Formations:	BONE SPRING	BONE SPRING UPPER BONE SPRING
Porous Zones:	RUSTLER TOP OF SALT BOTTOM OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIMESTONE	RUSTLER TOP OF SALT BASE OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING 2ND
Markers:	RUSTLER TOP OF SALT BOTTOM OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING LIMESTONE	RUSTLER TOP OF SALT BASE OF SALT LAMAR BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING 2ND