

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address COG Operating LLC 2208 W Main Street Artesia, NM 88210		² OGRID Number 229137
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30 - 025-44303	⁵ Pool Name Bradley; Bone Spring	⁶ Pool Code 7280
⁷ Property Code 320525	⁸ Property Name Tigercat Federal Com	⁹ Well Number 2H

HOBBS OCO
NOV 09 2018
RECEIVED

II. ¹⁰ Surface Location

UI or lot no	Section	Township	Range	Lot Idn	Feet from the	North/SouthLine	Feet from the	East/West line	County
B	8	26S	33E		355	North	1650	East	Lea

¹¹ Bottom Hole Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	17	26S	33E		419	South	1659	East	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 9/25/18	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
	Alpha Crude Connector Pipeline	O
298751	Energy Transfer 2001 Bryan Street Ste., 3700 Dallas, TX 75201	G

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBTD	²⁵ Perforations	²⁶ DHC, MC
1/21/18	9/20/18	20302	20200	10,461-20,105	
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17 1/2	13 3/8	905'	750		
12 1/4	9 5/8	4807'	1550		
8 3/4	5 1/2	19876	3150		
	2 7/8	9680			

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
9/25/18	09/25/18	9/25/18	24 Hrs	800	1650
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas	⁴¹ Test Method	
28/64	60	2490	275		

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Amanda Avery*
Printed name: Amanda Avery
Title: Regulatory Tech II
E-mail Address: aavery@concho.com
Date: 11/05/18
Phone: 575-748-6962

OIL CONSERVATION DIVISION
Approved by: *Karen Sharp*
Title: *Staff Mgr*
Approval Date: *11-9-18*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

5. Lease Serial No.
NMNM0160973

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well
 Oil Well Gas Well Other

8. Well Name and No.
TIGERCAT FEDERAL COM 2H

2. Name of Operator
COG OPERATING LLC

Contact: AMANDA AVERY
E-Mail: aavery@concho.com

9. API Well No.
30-025-44303

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

3b. Phone No. (include area code)
Ph: 575-748-6940

10. Field and Pool or Exploratory Area
BRADLEY; BONE SPRING

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 8 T26S R33E NWNE 355FNL 1650FEL
32.064315 N Lat, 103.591101 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			
<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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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	
	<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 recomplate 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.

07/02/18 Test annulus to 1500# Set CBP @ 19,800' and test csg to 8542#. Good test.

07/20/18 to 08/07/18 Perf 10,438-19,775' (1560). Acdz w/163,076 gal 7 1/2%; frac w/18,767,400# sand & 16,357,456 gal fluid.

08/18/18 to 08/20/18 Drilled out CFP's. Clean down to 19,601'.

08/04/18 Set 2 7/8" 6.5# L-80 tbg @ 9680' @ packer @ 9664.

09/25/18 Began flowing back & testing. Date of first production.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #442838 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Hobbs

Name (Printed/Typed) AMANDA AVERY Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 11/06/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ 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 _____

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.

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.
NMNM0160973

1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name	
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 _____		7. Unit or CA Agreement Name and No.	
2. Name of Operator COG OPERATING LLC		Contact: AMANDA AVERY E-Mail: aavery@concho.com	
3. Address 2208 W MAIN STREET ARTESIA, NM 88210		3a. Phone No. (include area code) Ph: 575-748-6940	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 8 T26S R33E Mer NMP At surface NWNE 355FNL 1650FEL 32.064315 N Lat, 103.591101 W Lon Sec 8 T26S R33E Mer NMP At top prod interval reported below NWNE 355FNL 1650FEL 32.064315 N Lat, 103.591101 W Lon Sec 17 T26S R33E Mer NMP At total depth SESE 419FSL 1659FEL 32.037423 N Lat, 103.591136 W Lon		8. Lease Name and Well No. TIGERCAT FEDERAL COM 2H	
14. Date Spudded 02/22/2018		15. Date T.D. Reached 03/15/2018	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 09/25/2018		9. API Well No. 30-025-44303	
18. Total Depth: MD 19876 TVD 10341		19. Plug Back T.D.: MD 19601 TVD 10341	
20. Depth Bridge Plug Set: MD 19800 TVD 10341		10. Field and Pool, or Exploratory BRADLEY; BONE SPRING	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)		11. Sec., T., R., M., or Block and Survey or Area Sec 8 T26S R33E Mer NMP	
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)		12. County or Parish LEA	
23. Casing and Liner Record (Report all strings set in well)		13. State NM	
17. Elevations (DF, KB, RT, GL)* 3322 GL		17. Elevations (DF, KB, RT, GL)* 3322 GL	

23. Casing and Liner Record (Report all strings set in well)	
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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		905		750		0	
12.250	9.625 J55	40.0		4807		1550		0	
8.750	5.500 P110			19876		3150		0	

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	9680	9664						

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	10438	19775	10438 TO 19775		1620	
B)						
C)						
D)						

Depth Interval	Amount and Type of Material
10348 TO 19775	SEE ATTACHED

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/25/2018	09/25/2018	24	→	60.0	275.0	2490.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
28/64	800	1650.0	→	60	275	2490		POW	

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	
			→						

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
RSLR	874			RSLR	874
TOS	1201			TOS	1201
BOS	4658			BOS	4658
LMAR	4896			LMAR	4896
BLCN	4920			BLCN	4920
FBSG	9962			FBSG	9962

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 #442834 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Hobbs**

Name (please print) AMANDA AVERY Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 11/06/2018

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Tigercat Federal Com #3H

<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	22260	361983	633042.9
2	2268	309404	403914
3	2268	289693	304521.84
4	2268	359815	408492
5	3024	359600	427350
6	3024	360140	443856
7	3024	358473	457842
8	3192	369503	431088
9	3024	356998	440538
10	3024	360133	488427.24
11	16632	360031	492030
12	3024	360930	433440
13	4032	357670	444948
14	3024	362274	440748
15	3024	342006	430164
16	3024	356640	408408
17	3024	315068	415296
18	3024	359473	453600
19	3024	353255	391482
20	3024	350226	510090
21	3024	352990	596064
22	2268	355990	480606
23	3024	360082	428484
24	3024	363015	560322
25	3024	373712	522984
Totals	106,596	8,809,104	10,814,695

From Bottom to Top	Stage 1	Distance Between Perfs	Shots	Stage 2	Distance Between Perfs	Shots	Stage 3	Distance Between Perfs	Shots	Stage 4	Distance Between Perfs	Shots	Stage 5	Distance Between Perfs	Shots
	17,422	20	5	17,259	28	5	17,079	23	5	16,898	27	5	16,719	23	5
	17,402	20	5	17,242	28	5	17,056	22	5	16,876	23	5	16,700	27	5
	17,382	20	4	17,214	22	4	17,034	23	4	16,853	22	4	16,673	25	4
	17,362	20	4	17,192	23	4	17,011	19	4	16,831	23	4	16,648	20	4
	17,342	15	3	17,169	22	3	16,992		3	16,808	22	3	16,628	23	3
	17,327	25	3	17,147	23	3	16,966	25	3	16,786	23	3	16,605	22	3
	17,302	15	3	17,124	22	3	16,941	16	3	16,763	21	3	16,583	23	3
	17,287		3	17,102		3	16,925		3	16,742		3	16,560		3
	Plug to Plug	68	30	Plug to Plug	75	30	Plug to Plug	79	30	Plug to Plug	84	30	Plug to Plug	79	30
Frac Plug	17,430	Total Shots	Frac Plug	17,267	Total Shots	Frac Plug	17,090	Total Shots	Frac Plug	16,915	Total Shots	Frac Plug	16,727	Total Shots	

From Bottom to Top	Stage 6	Distance Between Perfs	Shots	Stage 7	Distance Between Perfs	Shots	Stage 8	Distance Between Perfs	Shots	Stage 9	Distance Between Perfs	Shots	Stage 10	Distance Between Perfs	Shots
	16,537	23	5	16,357	26	5	16,176	28	5	15,996	23	5	15,805	33	5
	16,515	23	5	16,334	22	5	16,150	19	5	15,973	21	5	15,785	15	5
	16,492	22	4	16,312	23	4	16,131	22	4	15,952	24	4	15,770	27	4
	16,470	28	4	16,289	22	4	16,109	23	4	15,928	27	4	15,743	18	4
	16,442	17	3	16,267	22	3	16,086	22	3	15,901	18	3	15,725	24	3
	16,425	25	3	16,245	23	3	16,064	23	3	15,883	23	3	15,701	21	3
	16,400	17	3	16,222	18	3	16,041	22	3	15,860	22	3	15,680	22	3
	16,383		3	16,204		3	16,019		3	15,838		3	15,658		3
	Plug to Plug	75	30	Plug to Plug	84	30	Plug to Plug	69	30	Plug to Plug	79	30	Plug to Plug	72	30
Frac Plug	16,545	Total Shots	Frac Plug	16,373	Total Shots	Frac Plug	16,178	Total Shots	Frac Plug	16,007	Total Shots	Frac Plug	15,815	Total Shots	

From Bottom to Top	Stage 11	Distance Between Perfs	Shots	Stage 12	Distance Between Perfs	Shots	Stage 13	Distance Between Perfs	Shots	Stage 14	Distance Between Perfs	Shots	Stage 15	Distance Between Perfs	Shots
	15,635	23	5	15,449	28	5	15,271	26	5	15,093	23	5	14,904	32	5
	15,612	22	5	15,432	23	5	15,253	24	5	15,071	19	5	14,890	22	5
	15,590	23	4	15,409	22	4	15,229	25	4	15,052	26	4	14,868	23	4
	15,567	22	4	15,387	23	4	15,204	20	4	15,026	26	4	14,845	22	4
	15,545	23	3	15,364	22	3	15,184	23	3	15,000	19	3	14,823	22	3
	15,522	21	3	15,342	23	3	15,161	22	3	14,981	24	3	14,801	23	3
	15,501	24	3	15,319	22	3	15,139	23	3	14,957	21	3	14,778	17	3
	15,477		3	15,297		3	15,116		3	14,936		3	14,761		3
	Plug to Plug	79	30	Plug to Plug	79	30	Plug to Plug	76	30	Plug to Plug	79	30	Plug to Plug	67	30
Frac Plug	15,646	Total Shots	Frac Plug	15,466	Total Shots	Frac Plug	15,280	Total Shots	Frac Plug	15,105	Total Shots	Frac Plug	14,912	Total Shots	

From Bottom to Top	Stage 16	Distance Between Perfs	Shots	Stage 17	Distance Between Perfs	Shots	Stage 18	Distance Between Perfs	Shots	Stage 19	Distance Between Perfs	Shots	Stage 20	Distance Between Perfs	Shots
	14,732	29	5	14,552	23	5	14,370	24	5	14,188	26	5	14,010	23	5
	14,709	22	5	14,529	22	5	14,349	23	5	14,168	22	5	13,988	23	5
	14,687	22	4	14,507	23	4	14,326	22	4	14,146	19	4	13,965	22	4
	14,665	23	4	14,484	22	4	14,304	23	4	14,127	26	4	13,943	23	4
	14,642	22	3	14,462	23	3	14,281	22	3	14,101	26	3	13,920	22	3
	14,620	23	3	14,439	19	3	14,259	23	3	14,075	19	3	13,898	23	3
	14,597	22	3	14,420	26	3	14,236	22	3	14,056	23	3	13,875	22	3
	14,575		3	14,394		3	14,214		3	14,033		3	13,853		3
	Plug to Plug	79	30	Plug to Plug	79	30	Plug to Plug	81	30	Plug to Plug	69	30	Plug to Plug	79	30
Frac Plug	14,744	Total Shots	Frac Plug	14,563	Total Shots	Frac Plug	14,385	Total Shots	Frac Plug	14,196	Total Shots	Frac Plug	14,022	Total Shots	

From Bottom to Top	Stage 21	Distance Between Perfs	Shots	Stage 22	Distance Between Perfs	Shots	Stage 23	Distance Between Perfs	Shots	Stage 24	Distance Between Perfs	Shots	Stage 25	Distance Between Perfs	Shots
	13,833	20	5	13,642	30	5	13,469	22	5	13,282	29	5	13,101	30	5
	13,807	26	5	13,627	23	5	13,446	22	5	13,266	26	5	13,085	22	5
	13,781	19	4	13,604	21	4	13,424	23	4	13,240	19	4	13,063	21	4
	13,762	22	4	13,583	24	4	13,401	22	4	13,221	23	4	13,042	24	4
	13,740	23	3	13,559	27	3	13,379	23	3	13,198	22	3	13,018	19	3
	13,717	22	3	13,532	18	3	13,356	22	3	13,176	23	3	12,999	26	3
	13,695	23	3	13,514	23	3	13,334	23	3	13,153	22	3	12,973	13	3
	13,672		3	13,491		3	13,311		3	13,131		3	12,960		3
	Plug to Plug	79	30	Plug to Plug	68	30	Plug to Plug	79	30	Plug to Plug	79	30	Plug to Plug	68	30
Frac Plug	13,841	Total Shots	Frac Plug	13,651	Total Shots	Frac Plug	13,480	Total Shots	Frac Plug	13,300	Total Shots	Frac Plug	13,110	Total Shots	