

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

RECEIVED

DEC 14 2018

Form C-104  
Revised August 1, 2011

Submit one copy to appropriate District Office  
DISTRICT II-ARTESIA

AMENDED REPORT

**I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT**

<sup>1</sup> Operator name and Address COG Operating LLC 2208 W. Main Street Artesia, NM 88210		<sup>2</sup> OGRID Number 229137
		<sup>3</sup> Reason for Filing Code/ Effective Date NW
<sup>4</sup> API Number 30 - 015-45045	<sup>5</sup> Pool Name Rock Spur; Bone Spring	<sup>6</sup> Pool Code 52775
<sup>7</sup> Property Code 321562	<sup>8</sup> Property Name Pudge Federal	<sup>9</sup> Well Number 21H

**II. <sup>10</sup> Surface Location**

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
P	31	25S	29E		615	South	760	East	Eddy

**<sup>11</sup> 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
P	6	26S	29E		239	South	330	East	Eddy
<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code	<sup>14</sup> Gas Connection Date 9/23/18	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date				

**III. Oil and Gas Transporters**

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> O/G/W
	Texla 1100 Louisiana, Ste 4700 Houston, TX 77002	O
298751	Energy Transfer Company 2001 Bryan Street Ste 3700 Dallas, TX 75201	G

**IV. Well Completion Data**

<sup>21</sup> Spud Date 6/27/18	<sup>22</sup> Ready Date 9/23/18	<sup>23</sup> TD 13920'	<sup>24</sup> PBDT 13800'	<sup>25</sup> Perforations 9203-13804'	<sup>26</sup> DHC, MC
<sup>27</sup> Hole Size	<sup>28</sup> Casing & Tubing Size	<sup>29</sup> Depth Set	<sup>30</sup> Sacks Cement		
17 1/2"	13 3/8"	420'	500 - cur		
12 1/4"	9 5/8"	2787'	1220 - cur		
8 3/4"	5 1/2"	13905'	2625 - cur		
	2 7/8"	7865'			

**V. Well Test Data**

<sup>31</sup> Date New Oil 9/23/18	<sup>32</sup> Gas Delivery Date 9/23/18	<sup>33</sup> Test Date 9/23/18	<sup>34</sup> Test Length 24 Hrs	<sup>35</sup> Tbg. Pressure 1050	<sup>36</sup> Csg. Pressure 450
<sup>37</sup> Choke Size 24/64	<sup>38</sup> Oil 545	<sup>39</sup> Water 1995	<sup>40</sup> Gas 847	<sup>41</sup> Test Method Flowing	

<sup>42</sup> 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:  
12/12/18

Phone:  
575-748-6962

OIL CONSERVATION DIVISION	
Approved by:	<i>Rusty Klean</i>
Title:	<i>Business Ops Spec A</i>
Approval Date:	<i>12-20-2018</i>
Pending BLM approvals will subsequently be reviewed and scanned	

DEC 14 2018

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

Case Serial No. MNM100555

1a. Type of Well [X] Gas Well [ ] Oil Well [ ] Dry [ ] Other [ ]
b. Type of Completion [X] New Well [ ] Work Over [ ] Deepen [ ] Plug Back [ ] Diff. Resvr. [ ]
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)\*
At surface SESE Lot P 615FSL 780FEL 32.080635 N Lat, 104.017483 W Lon
At top prod interval reported below SESE Lot P 615FSL 780FEL 32.080635 N Lat, 104.017483 W Lon
At total depth SESE Lot P 239FSL 330FEL 32.065022 N Lat, 104.016037 W Lon
14. Date Spudded 06/27/2018
15. Date T.D. Reached 07/13/2018
16. Date Completed [ ] D & A [X] Ready to Prod. 09/23/2018
17. Elevations (DF, KB, RT, GL)\* 2939 GL
18. Total Depth: MD 13920 TVD 8480
19. Plug Back T.D.: MD 13800 TVD 8480
20. Depth Bridge Plug Set: MD 13829 TVD 8180
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run? [X] No [ ] Yes (Submit analysis)
Directional Survey? [ ] No [X] Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)
Table with columns: Hole Size, Size/Grade, Wt. (#/ft.), Top (MD), Bottom (MD), Stage Cementer Depth, No. of Sks. & Type of Cement, Slurry Vol. (BBL), Cement Top\*, Amount Pulled

24. Tubing Record
Table with columns: Size, Depth Set (MD), Packer Depth (MD)

25. Producing Intervals
26. Perforation Record
Table with columns: Formation, Top, Bottom, Perforated Interval, Size, No. Holes, Perf. Status

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.
Table with columns: Depth Interval, Amount and Type of Material

28. Production - Interval A
Table with columns: Date First Produced, Test Date, Hours Tested, Test Production, Oil BBL, Gas MCF, Water BBL, Oil Gravity Corr. API, Gas Gravity, Production Method

28a. Production - Interval B
Table with columns: Date First Produced, Test Date, Hours Tested, Test Production, Oil BBL, Gas MCF, Water BBL, Oil Gravity Corr. API, Gas Gravity

Pending BLM approvals will subsequently be reviewed and scanned

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
TOP OF SALT	530			TOP OF SALT	530
BOTTOM OF SALT	2609			BOTTOM OF SALT	2609
LAMAR	2805			LAMAR	2805
BELL CANYON	2845			BELL CANYON	2845
CHERRY CANYON	3679			CHERRY CANYON	3679
BRUSHY CANYON	4968			BRUSHY CANYON	4968
BONE SPRING 1ST	7474			BONE SPRING 1ST	7474
BONE SPRING 2ND	8180			BONE SPRING 2ND	8180

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 #447434 Verified by the BLM Well Information System.  
For COG OPERATING LLC, sent to the Carlsbad**

Name (please print) AMANDA AVERY Title AUTHORIZED REPRESENTATIVE

Signature \_\_\_\_\_ (Electronic Submission) Date 12/12/2018

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 \*\***

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DEC 14 2018

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.  
NMNM100555

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
PUDGE FEDERAL 21H

9. API Well No.  
30-015-45045

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

11. County or Parish, State  
EDDY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well  
 Oil Well  Gas Well  Other

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

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

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 31 T25S R29E Mer NMP SESE 615FSL 760FEL  
32.080835 N Lat, 104.017483 W Lon

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

TYPE OF SUBMISSION	TYPE OF ACTION				
<input 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 checked="" 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 Hydraulic Fracture	
	<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 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.

7/31/18 Test csg to 8500#. Ran CBL TOC @ 290'. Set composite bridge plug @ 13,829'. Test csg to 8502# Good test.  
8/10/18 - 8/15/18 Perf and plug 9,203-13,804' Acdz w/ 78,441 gal 7 1/2%; frac w/ 9,370,008 # sand & 7,683,823 gal fluid.  
8/19/18 to 8/20/18 Drilled out composite frac plug's. Clean down to PBSD @ 13,800'.  
8/20/18 - 8/29/18 Set 2 7/8" 6.5# L-80 tbg @ 7,865' & pkr @ 7,855'. Installed gas-lift system.  
9/21/18 Begin flowback and testing.  
9/23/18 Date of first production.

14. I hereby certify that the foregoing is true and correct.  
**Electronic Submission #446648 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad**

Name (Printed/Typed) AMANDA AVERY Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 12/05/2018

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By \_\_\_\_\_ Title \_\_\_\_\_

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 \_\_\_\_\_

Pending BLM approvals will subsequently be reviewed and scanned

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## Pudge Federal #21H

<u>Perfs</u>	<u>7.5% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	1512	360007	294042
2	3000	360073	291792
3	3000	359684	294858
4	2999.64	360309	296580
5	3024	360007	304122
6	3012	359938	299322
7	3012	360088	290082
8	3012	360048	294030
9	3024	360054	289002
10	3024	360091	294924
11	3012	360045	299700
12	3024	366584	313488
13	3024	360254	292488
14	4524	360001	309528
15	3000	360034	284148
16	3012	360023	291426
17	3024	360051	306646
18	3024	360271	289296
19	3024	360220	290136
20	3024	360122	286692
21	3024	360044	290976
22	3024	360367	319956
23	3024	360103	284928
24	3012	361145	294005
25	3024	361016	290976
26	3024	359429	290682
<b>Totals</b>	<b>78,441</b>	<b>9,370,008</b>	<b>7,683,823</b>

	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
	From Bottom to Top	13,804	22	4	13,807	41	4	13,444	28	4	13,265	27	4	13,090	25
13,782		22	4	13,592	10	4	13,423	19	4	13,248	22	4	13,073	25	4
13,760		23	4	13,582	23	4	13,404	25	4	13,226	22	4	13,048	22	4
13,737		22	4	13,559	22	4	13,379	20	4	13,204	23	4	13,026	24	4
13,715		22	4	13,537	22	4	13,359	22	4	13,181	22	4	13,002	21	4
13,693		22	4	13,515	22	4	13,337	22	4	13,159	22	4	12,981	22	4
13,671		23	3	13,493	21	3	13,315	23	3	13,137	22	3	12,959	22	3
13,648			3	13,472		3	13,292		3	13,115		3	12,937		3
Plug to Plug	92	30	Plug to Plug	58	30	Plug to Plug	75	30	Plug to Plug	76	30	Plug to Plug	74	30	
Frac Plug	13,829	Total Shots	Frac Plug	13,617	Total Shots	Frac Plug	13,454	Total Shots	Frac Plug	13,280	Total Shots	Frac Plug	13,100	Total Shots	

	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
	From Bottom to Top	12,916	21	4	12,738	24	4	12,552	29	4	12,374	29	4	12,203	22
12,892		22	4	12,710	18	4	12,536	27	4	12,358	22	4	12,180	22	4
12,870		22	4	12,692	22	4	12,509	17	4	12,336	21	4	12,158	22	4
12,848		23	4	12,670	22	4	12,492	22	4	12,315	23	4	12,136	22	4
12,825		22	4	12,648	23	4	12,470	23	4	12,292	19	4	12,114	22	4
12,803		22	4	12,625	22	4	12,447	22	4	12,273	26	4	12,092	23	4
12,781		19	3	12,603	22	3	12,425	22	3	12,247	22	3	12,069	22	3
12,762			3	12,581		3	12,403		3	12,225		3	12,047		3
Plug to Plug	78	30	Plug to Plug	78	30	Plug to Plug	75	30	Plug to Plug	69	30	Plug to Plug	77	30	
Frac Plug	12,926	Total Shots	Frac Plug	12,748	Total Shots	Frac Plug	12,567	Total Shots	Frac Plug	12,384	Total Shots	Frac Plug	12,213	Total Shots	

	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
	From Bottom to Top	12,027	20	4	11,838	31	4	11,670	23	4	11,491	22	4	11,304	31
12,003		26	4	11,825	23	4	11,642	18	4	11,469	22	4	11,291	22	4
11,977		19	4	11,802	22	4	11,624	25	4	11,447	23	4	11,269	21	4
11,958		24	4	11,780	22	4	11,599	19	4	11,424	20	4	11,248	24	4
11,934		20	4	11,758	22	4	11,580	24	4	11,404	24	4	11,224	25	4
11,914		23	4	11,736	23	4	11,556	20	4	11,380	19	4	11,199	19	4
11,891		22	3	11,713	20	3	11,536	23	3	11,361	26	3	11,180	23	3
11,869			3	11,693		3	11,513		3	11,335		3	11,157		3
Plug to Plug	79	30	Plug to Plug	68	30	Plug to Plug	81	30	Plug to Plug	78	30	Plug to Plug	66	30	
Frac Plug	12,037	Total Shots	Frac Plug	11,848	Total Shots	Frac Plug	11,680	Total Shots	Frac Plug	11,502	Total Shots	Frac Plug	11,314	Total Shots	

	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
	From Bottom to Top	11,136	21	4	10,949	31	4	10,773	29	4	10,594	30	4	10,424	22
11,113		22	4	10,935	22	4	10,757	27	4	10,579	22	4	10,401	22	4
11,091		23	4	10,913	28	4	10,730	17	4	10,557	22	4	10,379	22	4
11,068		22	4	10,885	17	4	10,713	25	4	10,535	23	4	10,357	22	4
11,046		22	4	10,868	22	4	10,688	20	4	10,512	17	4	10,335	23	4
11,024		23	4	10,846	22	4	10,668	22	4	10,495	27	4	10,312	22	4
11,001		21	3	10,824	22	3	10,646	22	3	10,468	22	3	10,290	22	3
10,980			3	10,802		3	10,624		3	10,446		3	10,268		3
Plug to Plug	78	30	Plug to Plug	74	30	Plug to Plug	77	30	Plug to Plug	69	30	Plug to Plug	78	30	
Frac Plug	11,146	Total Shots	Frac Plug	10,959	Total Shots	Frac Plug	10,790	Total Shots	Frac Plug	10,604	Total Shots	Frac Plug	10,435	Total Shots	

	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
	From Bottom to Top	10,246	22	4	10,063	27	4	9,891	21	4	9,700	34	4	9,534	27
10,223		20	4	10,045	22	4	9,868	23	4	9,685	18	4	9,512	23	4
10,203		24	4	10,023	21	4	9,845	22	4	9,667	22	4	9,489	22	4
10,179		18	4	10,002	23	4	9,823	26	4	9,645	22	4	9,467	22	4
10,161		27	4	9,979	26	4	9,797	18	4	9,623	25	4	9,445	22	4
10,134		22	4	9,953	19	4	9,779	23	4	9,598	20	4	9,423	23	4
10,112		22	3	9,934	22	3	9,756	22	3	9,578	17	3	9,400	22	3
10,090			3	9,912		3	9,734		3	9,561		3	9,378		3
Plug to Plug	78	30	Plug to Plug	71	30	Plug to Plug	78	30	Plug to Plug	65	30	Plug to Plug	79	30	
Frac Plug	10,257	Total Shots	Frac Plug	10,073	Total Shots	Frac Plug	9,901	Total Shots	Frac Plug	9,710	Total Shots	Frac Plug	9,546	Total Shots	

	Stage 26	Distance Between Perfs	Shots	Stage 27	Distance Between Perfs	Shots	Stage 28	Distance Between Perfs	Shots	Stage 29	Distance Between Perfs	Shots	Stage 30	Distance Between Perfs	Shots
	From Bottom to Top	9,351	27	4	9203			0			0			0	
9,334		25	4												
9,309		20	4												
9,289		22	4												
9,267		22	4												
9,245		22	4												
9,223		20	3												
9,203			3												
Plug to Plug	78	30	Plug to Plug	0	0	Plug to Plug	0	0	Plug to Plug	0	0	Plug to Plug	0	0	
Frac Plug	9,367	Total Shots	Frac Plug		Total Shots	Frac Plug		Total Shots	Frac Plug		Total Shots	Frac Plug		Total Shots	