

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

Form C-104  
Revised August 1, 2011

HOBBS OGD  
MAR 29 2017  
RECEIVED

Submit one copy to appropriate District Office

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 - 025-43286	<sup>5</sup> Pool Name Red Hills; Bone Spring, North	<sup>6</sup> Pool Code 96434
<sup>7</sup> Property Code 316278	<sup>8</sup> Property Name Sombbrero Federal Com	<sup>9</sup> Well Number 4H

**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
M	13	24S	34E		460	South	380	West	Lea

**<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
L	12	24S	34E		2436	South	377	West	Lea

<sup>12</sup> Lse Code F	<sup>13</sup> Producing Method Code F	<sup>14</sup> Gas Connection Date 3/8/17	<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
	Alpha Crude Connector Pipeline	O
24650	Targa Midstream Services, LP 1000 Louisiana - Ste 4700 Houston, TX 77002	G

**IV. Well Completion Data**

<sup>21</sup> Spud Date 12/13/16	<sup>22</sup> Ready Date 3/5/17	<sup>23</sup> TD 16640'	<sup>24</sup> PBTB 16535'	<sup>25</sup> Perforations 9738-16510'	<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"	1128'	870		
12 1/4"	9 5/8"	5326'	1410		
8 3/4"	5 1/2"	16633'	2975		
	2 7/8"	9035'			

**V. Well Test Data**

<sup>31</sup> Date New Oil 3/8/17	<sup>32</sup> Gas Delivery Date 3/8/17	<sup>33</sup> Test Date 3/12/17	<sup>34</sup> Test Length 24 Hrs	<sup>35</sup> Tbg. Pressure 150#	<sup>36</sup> Csg. Pressure 1050#
<sup>37</sup> Choke Size	<sup>38</sup> Oil 81	<sup>39</sup> Water 3095	<sup>40</sup> Gas 75		<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: 

Printed name:  
Stormi Davis

Title:  
Regulatory Analyst

E-mail Address:  
sdavis@concho.com

Date:  
3/20/17

Phone:  
575-748-6946

OIL CONSERVATION DIVISION

Approved by: 

Title: **Petroleum Engineer**

Approval Date: 04/25/17

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.*

**HOBBS OCD**  
**MAR 29 2017**  
**RECEIVED**

5. Lease Serial No.  
NMNM123527

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.  
SOMBRERO FEDERAL COM 4H

9. API Well No.  
30-025-43286

10. Field and Pool or Exploratory Area  
RED HILLLS; BONE SPRING N

11. County or Parish, State  
LEA COUNTY, NM

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
COG OPERATING LLC  
Contact: STORMI DAVIS  
E-Mail: sdavis@concho.com

3a. Address  
2208 WEST MAIN  
ARTESIA, NM 88210  
3b. Phone No. (include area code)  
Ph: 575-748-6946

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 13 T24S R34E Mer NMP SWSW 460FSL 380FWL

**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
	<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.

1/22/17 to 2/3/17 Load & test annulus to 1500#. Good test. Ran CBL. TOC @ 4350'. Set CBP @ 16535' & test csg to 8375#. Good test. Perf 9738-16510' (1980). Acdz w/134,556 gal 7 1/2%; frac w/13,073,048# sand & 18,486,792 gal fluid.

2/6/17 to 2/8/17 Drilled out CFP's. Wash down to CBP @ 16535'.

2/18/17 Set 2 7/8" 6.5# L-80 tbg @ 9035' & pkr @ 9025'. SI for tank battery construction.

3/5/17 Began flowing back & testing.

3/8/17 Date of first production.

14. I hereby certify that the foregoing is true and correct.  
**Electronic Submission #371111 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Hobbs**

Name (Printed/Typed) STORMI DAVIS Title PREPARER

Signature (Electronic Submission) Date 03/27/2017

**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.

(Instructions on page 2)

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

HOBBS OCD

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

MAR 29 2017

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMNM123527

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

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

6. If Indian, Allottee or Tribe Name \_\_\_\_\_

7. Unit or CA Agreement Name and No. \_\_\_\_\_

2. Name of Operator  
COG OPERATING LLC Contact: STORMI DAVIS  
E-Mail: sdavis@concho.com

8. Lease Name and Well No.  
SOMBREIRO FEDERAL COM 4H

3. Address 2208 WEST MAIN  
ARTESIA, NM 88210 3a. Phone No. (include area code)  
Ph: 575-748-6946

9. API Well No. 30-025-43286

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
At surface Sec 13 T24S R34E Mer NMP  
SWSW 460FSL 380FWL  
At top prod interval reported below  
Sec 12 T24S R34E Mer NMP  
At total depth NWSW 2436FSL 377FWL

10. Field and Pool, or Exploratory  
RED HILLS; BONE SPRING, N

11. Sec., T., R., M., or Block and Survey  
or Area Sec 13 T24S R34E Mer NMP

12. County or Parish  
LEA 13. State  
NM

14. Date Spudded  
12/13/2016 15. Date T.D. Reached  
01/15/2017 16. Date Completed  
 D & A  Ready to Prod.  
03/05/2017

17. Elevations (DF, KB, RT, GL)\*  
3475 GL

18. Total Depth: MD 16640 TVD 9312 19. Plug Back T.D.: MD 16535 TVD 9317 20. Depth Bridge Plug Set: MD 16535 TVD 9317

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
CNL 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	1128		870		0	
12.250	9.625 J55	40.0	0	5326		1410		0	
8.750	5.500 P110	17.0	0	16633		2975		4350	

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	9035	9025						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	9738	16510	9738 TO 16510	0.430	1980	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
9738 TO 16510	SEE ATTACHED

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
03/08/2017	03/12/2017	24	→	81.0	75.0	3095.0			FLOWS FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	150	1050.0	→	81	75	3095		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
			→						
Choke Size	Tbg. Press. Flwg. SI	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 #371121 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

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
LAMAR	5543	5574		LAMAR	5543
BELL CANYON	5575	6512		BELL CANYON	5575
CHERRY CANYON	6513	8062		CHERRY CANYON	6513
BRUSHY CANYON	8063	9415		BRUSHY CANYON	8063
BONE SPRING LM	9416	10499		BONE SPRING LM	9416
1ST BONE SPRING	10500	11190		1ST BONE SPRING	10500
2ND BONE SPRING	11191	12091		2ND BONE SPRING	11191
3RD BONE SPRING	12092	12533		3RD BONE SPRING	12092

32. Additional remarks (include plugging procedure):  
Surveys, log & perms/stimulation are attached.

Additional Tops:  
Wolfcamp: 12534'

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 #371121 Verified by the BLM Well Information System.  
For COG OPERATING LLC, sent to the Hobbs**

Name (please print) STORMI DAVIS Title PREPARER

Signature (Electronic Submission) Date 03/27/2017

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 \*\***

## SOMBRERO FEDERAL COM #4H (30-025-43286)

<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	1512	234830	354354
2	3024	281400	353892
3	3024	287900	525882
4	3024	198220	481026
5	3024	274810	422436
6	3024	293410	536340
7	3024	224310	350700
8	3024	298340	391146
9	3024	270120	444822
10	3024	279570	469644
11	3024	292340	430668
12	3024	298210	383544
13	3024	284670	417858
14	3024	278910	353724
15	3024	298920	419076
16	3024	301360	390222
17	3024	312950	740292
18	3024	298550	578676
19	3024	294940	637686
20	3024	305740	590730
21	3024	288458	500052
22	3024	299430	380604
23	3024	298450	406938
24	3024	297610	348474
25	3024	305270	505890
26	3024	299490	393918
27	3024	298740	355236
28	3024	299370	350028
29	3024	307500	355152
30	3024	301070	355656
31	3024	300070	351666
32	3024	299290	348768
33	3024	291940	344694
34	3024	300270	346878
35	3024	298500	342342
36	3024	296610	342048
37	3024	297620	408954
38	3012	293140	343170
39	3024	302380	346668
40	3024	296330	340284
41	3024	298340	336966
42	3024	301190	377118
43	3024	295020	345450
44	3024	303270	343812
45	3024	294190	343308
<b>Totals</b>	<b>134,556</b>	<b>13,073,048</b>	<b>18,486,792</b>

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
	16,510	38	14	16,340	57	14	16,207	38	14	16,053	41	14	15,905	38	14
	16,472	38	12	16,321	38	12	16,170	38	12	16,022	42	12	15,867	38	12
	16,434	37	10	16,283	38	10	16,132	38	10	15,980	37	10	15,829	38	10
	16,397		8	16,245		8	16,094		8	15,943		8	15,791		8
Plug to Plug	138	44	Plug to Plug	115	44	Plug to Plug	138	44	Plug to Plug	132	44	Plug to Plug	133	44	
Frac Plug	16,535	Total Shots	Frac Plug	16,360	Total Shots	Frac Plug	16,232	Total Shots	Frac Plug	16,075	Total Shots	Frac Plug	15,924	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
	15,753	38	14	15,602	40	14	15,451	38	14	15,294	43	14	15,148	38	14
	15,716	38	12	15,564	38	12	15,413	38	12	15,262	38	12	15,110	38	12
	15,678	36	10	15,526	37	10	15,375	38	10	15,224	38	10	15,072	37	10
	15,642		8	15,489		8	15,337		8	15,186		8	15,035		8
Plug to Plug	130	44	Plug to Plug	132	44	Plug to Plug	133	44	Plug to Plug	132	44	Plug to Plug	124	44	
Frac Plug	15,772	Total Shots	Frac Plug	15,621	Total Shots	Frac Plug	15,470	Total Shots	Frac Plug	15,318	Total Shots	Frac Plug	15,159	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
	14,997	38	14	14,840	43	14	14,694	36	14	14,543	38	14	14,391	38	14
	14,959	38	12	14,808	38	12	14,656	38	12	14,505	38	12	14,354	38	12
	14,921	38	10	14,770	40	10	14,618	37	10	14,467	38	10	14,316	38	10
	14,883		8	14,730		8	14,581		8	14,429		8	14,278		8
Plug to Plug	133	44	Plug to Plug	124	44	Plug to Plug	132	44	Plug to Plug	133	44	Plug to Plug	132	44	
Frac Plug	15,016	Total Shots	Frac Plug	14,854	Total Shots	Frac Plug	14,713	Total Shots	Frac Plug	14,562	Total Shots	Frac Plug	14,410	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
	14,240	38	14	14,089	38	14	13,937	38	14	13,786	38	14	13,625	48	13654
	14,202	38	12	14,051	38	12	13,897	31	12	13,748	38	12	13,597	38	
	14,164	37	10	14,013	38	10	13,866	42	10	13,710	37	10	13,559	30	
	14,127		8	13,975		8	13,824		8	13,673		8	13,529		
Plug to Plug	132	44	Plug to Plug	133	44	Plug to Plug	132	44	Plug to Plug	132	44	Plug to Plug	112	13654	
Frac Plug	14,259	Total Shots	Frac Plug	14,108	Total Shots	Frac Plug	13,956	Total Shots	Frac Plug	13,805	Total Shots	Frac Plug	13,641	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
	13,483	46	14	13,324	46	14	13,181	35	14	13,029	38	14	12,873	43	14
	13,446	38	12	13,294	38	12	13,143	38	12	12,992	38	12	12,840	38	12
	13,408	38	10	13,256	40	10	13,105	38	10	12,954	38	10	12,802	37	10
	13,370		8	13,216		8	13,067		8	12,916		8	12,765		8
Plug to Plug	132	44	Plug to Plug	124	44	Plug to Plug	133	44	Plug to Plug	132	44	Plug to Plug	132	44	
Frac Plug	13,502	Total Shots	Frac Plug	13,340	Total Shots	Frac Plug	13,200	Total Shots	Frac Plug	13,048	Total Shots	Frac Plug	12,897	Total Shots	

From Bottom to Top	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
	12,725	40	14	12,575	38	14	12,424	40	14	12,273	38	14	12,121	38	14
	12,689	38	12	12,538	38	12	12,386	38	12	12,235	38	12	12,083	42	12
	12,651	38	10	12,500	36	10	12,348	37	10	12,197	38	10	12,041	33	10
	12,613		8	12,464		8	12,311		8	12,159		8	12,008		8
Plug to Plug	127	44	Plug to Plug	130	44	Plug to Plug	132	44	Plug to Plug	132	44	Plug to Plug	134	44	
Frac Plug	12,740	Total Shots	Frac Plug	12,594	Total Shots	Frac Plug	12,443	Total Shots	Frac Plug	12,291	Total Shots	Frac Plug	12,142	Total Shots	

From Bottom to Top	Stage 31	Distance Between Perfs	Shots	Stage 32	Distance Between Perfs	Shots	Stage 33	Distance Between Perfs	Shots	Stage 34	Distance Between Perfs	Shots	Stage 35	Distance Between Perfs	Shots
	11,970	38	14	11,819	38	14	11,659	44	14	11,508	46	14	11,364	39	14
	11,932	38	12	11,781	38	12	11,630	38	12	11,478	37	12	11,330	41	12
	11,894	37	10	11,743	40	10	11,592	38	10	11,441	38	10	11,289	38	10
	11,857		8	11,703		8	11,554		8	11,403		8	11,251		8
Plug to Plug	132	44	Plug to Plug	135	44	Plug to Plug	132	44	Plug to Plug	121	44	Plug to Plug	133	44	
Frac Plug	11,989	Total Shots	Frac Plug	11,838	Total Shots	Frac Plug	11,686	Total Shots	Frac Plug	11,524	Total Shots	Frac Plug	11,384	Total Shots	

From Bottom to Top	Stage 36	Distance Between Perfs	Shots	Stage 37	Distance Between Perfs	Shots	Stage 38	Distance Between Perfs	Shots	Stage 39	Distance Between Perfs	Shots	Stage 40	Distance Between Perfs	Shots
	11,214	37	14	11,059	41	14	10,911	38	14	10,760	37	14	10,608	41	14
	11,176	38	12	11,027	40	12	10,872	37	12	10,719	36	12	10,570	37	12
	11,138	38	10	10,987	38	10	10,835	38	10	10,683	34	10	10,533	38	10
	11,100		8	10,949		8	10,797		8	10,649		8	10,495		8
Plug to Plug	128	44	Plug to Plug	132	44	Plug to Plug	133	44	Plug to Plug	129	44	Plug to Plug	132	44	
Frac Plug	11,228	Total Shots	Frac Plug	11,081	Total Shots	Frac Plug	10,930	Total Shots	Frac Plug	10,778	Total Shots	Frac Plug	10,627	Total Shots	

From Bottom to Top	Stage 41	Distance Between Perfs	Shots	Stage 42	Distance Between Perfs	Shots	Stage 43	Distance Between Perfs	Shots	Stage 44	Distance Between Perfs	Shots	Stage 45	Distance Between Perfs	Shots
	10,457	38	14	10,306	41	14	10,154	38	14	10,003	39	14	9,852	37	14
	10,419	39	12	10,268	38	12	10,116	40	12	9,965	38	12	9,814	35	12
	10,380	33	10	10,230	38	10	10,076	34	10	9,927	38	10	9,779	41	10
	10,347		8	10,192		8	10,042		8	9,889		8	9,738		8
Plug to Plug	133	44	Plug to Plug	132	44	Plug to Plug	136	44	Plug to Plug	133	44	Plug to Plug	132	44	
Frac Plug	10,480	Total Shots	Frac Plug	10,324	Total Shots	Frac Plug	10,178	Total Shots	Frac Plug	10,022	Total Shots	Frac Plug	9,870	Total Shots	