

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

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 - 025-44048	⁵ Pool Name Dogie Draw; Wolfcamp	⁶ Pool Code 17980
⁷ Property Code 319617	⁸ Property Name Square Bill Federal Com	⁹ Well Number 23H

II. ¹⁰ Surface Location

UL or lot no P	Section 31	Township 25S	Range 35E	Lot Idn	Feet from the 210	North/SouthLine South	Feet from the 1023	East/West line East	County Lea
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¹¹ Bottom Hole Location

UL or lot no J	Section 30	Township 25S	Range 35E	Lot Idn	Feet from the 2422	North/South line South	Feet from the 1634	East/West line East	County Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 8/15/18	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
24650	Targa Midstream Services, LP 1000 Louisiana Ste 4700 Houston, TX 77002	G

IV. Well Completion Data

²¹ Spud Date 11/17/17	²² Ready Date 8/15/18	²³ TD 20,115'	²⁴ PBTD 19990	²⁵ Perforations 12748-19965	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
13 1/2	10 3/4	1105'	850		
9 7/8	7 5/8	11,825'	1825		
6 3/4	5 5 1/2	20110-11285 11285 - 0	1565		
	2 7/8	11457			

V. Well Test Data

³¹ Date New Oil 8/15/18	³² Gas Delivery Date 08/15/18	³³ Test Date 8/15/18	³⁴ Test Length 24 Hrs	³⁵ Tbg. Pressure 4360	³⁶ Csg. Pressure 2700
³⁷ Choke Size 15/64	³⁸ Oil 98	³⁹ Water 2131	⁴⁰ Gas 0	⁴¹ Test Method	

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:
10/23/18

Phone:
575-748-6962

OIL CONSERVATION DIVISION

Approved by: *Karen Sharp*

Title: *Staff Mgr*

Approval Date: *10-29-18*

Documents pending BLM approvals will
subsequently be reviewed and scanned

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM A (REVISED)
OMB NO 1004-0137
Expires January 31, 2018

INDRY 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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1 Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5 Lease Serial No NMNM119280
2 Name of Operator COG OPERATING LLC		6 If Indian, Allottee or Tribe Name
Contact AMANDA AVERY E-Mail aavery@concho.com		7 If Unit or CA/Agreement, Name and/or No
3a Address 2208 W MAIN STREET ARTESIA, NM 88210	3b. Phone No (include area code) Ph 575-748-6940	8 Well Name and No SQUARE BILL FEDERAL COM 23H
4 Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 31 T25S R35E SESE 210FSL 1023FEL		9 API Well No 30-025-44048
		10 Field and Pool or Exploratory Area DOGIE DRAW, WOLFCAMP
		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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat 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 recompleat 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.

06/14/18 Test annulus to 1500#
06/16/18 to 07/17/18 Perf 12,868-19,975' (1600) Acdz w/59,178 gal 7 1/2%; frac w/12,295,239#
sand & 12,154,170 gal fluid.
07/19/18 to 07/20/18 Drilled out CFP's
07/23/18 Set 2 7/8" 6.5# L-80 tbg @ 11,457' @ packer @ 11,442 Installed gas lift system.
08/14/18 Began flowing back & testing. Date of first production

14 I hereby certify that the foregoing is true and correct. Electronic Submission #440878 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 10/23/2018

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 _____

Documents 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 willfully 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 ****

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.
NMNM119280

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

8. Lease Name and Well No.
SQUARE BILL FEDERAL COM 23H

3. Address 2208 W MAIN STREET
ARTESIA, NM 88210

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

9. API Well No.
30-025-44048

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface SESE 210FSL 1023FEL
Sec 31 T25S R35E Mer NMP
At top prod interval reported below SESE 210FSL 1023FEL
Sec 31 T25S R35E Mer NMP
At total depth 2422FSL 1634FEL
Sec 30 T25S R35E Mer NMP

10. Field and Pool, or Exploratory
DOGIE DRAW; WOLFCAMP

11. Sec., T., R., M., or Block and Survey
or Area Sec 31 T25S R35E Mer NMP

12. County or Parish
LEA

13. State
NM

14. Date Spudded
11/03/2017

15. Date T.D. Reached
01/09/2018

16. Date Completed
☐ D & A ☒ Ready to Prod.
08/14/2018

17. Elevations (DF, KB, RT, GL)*
3274 GL

18. Total Depth: MD 20110
TVD 12202

19. Plug Back T.D.: MD 19900
TVD 12202

20. Depth Bridge Plug Set: MD
TVD

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
13.500	10.750 L80	45.5	0	1105		850		0	
6.750	5.500 P110	23.0	0	11285		1565		0	
9.875	7.625 P110	29.7	0	11825	5376	1825		0	
6.750	5.000 P110	18.0	11285	20110					

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	11457	11442						

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	12868	19975	12868 TO 19975		1600	
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
12868 TO 19975	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
08/15/2018	08/15/2018	24	→	98.0	0.0	2131.0			GAS LIFT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
15/64	4360	2700.0	→	98	0	2131		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	
			→						

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

ELECTRONIC SUBMISSION #440876 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPEI

Documents 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
RSLR	1075			RSLR	1075
TOS	1486			TOS	1486
BOS	5049			BOS	5049
LMAR	5347			LMAR	5347
BLCN	5392			BLCN	5392
CYCN	6353			CYCN	6353
BYCN	7931			BYCN	7931
FBSG	10443			FBSG	10443

32. Additional remarks (include plugging procedure):

SBSG 11166 SBSG 11166
TBSG 12045 TBSG 12045
WFMP 12521 WFMP 12521

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 #440876 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Hobbs

Name (please print) AMANDA AVERYTitle AUTHORIZED REPRESENTATIVE

Signature _____ (Electronic Submission)

Date 10/23/2018

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 ****

Square Bill Federal Com #23H

<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	0	361312	305340
2	1512	360056	299334
3	1512	361385	304290
4	1512	361769	304290
5	1512	361059	338856
6	1512	343629	295386
7	1512	361989	322728
8	3024	359943	326004
9	1512	360491	294210
10	1512	361533	313656
11	1512	361178	303450
12	1512	360295	334782
13	1512	364462	292824
14	1512	365954	294294
15	1512	362129	331044
16	1512	362163	291816
17	1512	363100	293370
18	1512	359852	294672
19	1512	363548	315252
20	1512	364174	332976
21	1596	362198	296226
22	1596	361204	295932
23	1512	364059	290472
24	1512	363720	294084
25	1512	361453	290724
26	1428	359429	292362
27	1512	363036	330498
28	1512	362322	291606
29	1554	361062	280728
30	1512	362812	321762
31	1512	362777	284592
32	1512	359689	291018
33	1470	361984	304290
34	1512	361996	289590
35	1512	361933	317184
36	1512	362662	285642
37	1512	360530	289212
38	1428	365781	287154
39	1680	360228	315126
40	1554	345553	317394
Totals	59,178	12,295,239	12,154,170

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	19,975	19	5	19,773	66	5	19,615	26	5	19,447	20	5	19,265	20	5
	19,956	20	5	19,751	16	5	19,596	24	5	19,418	29	5	19,240	19	5
	19,936	19	5	19,735	17	5	19,572	20	5	19,389	16	5	19,221	46	5
	19,917	19	5	19,718	19	5	19,552	25	5	19,373	26	5	19,175	24	5
	19,898	20	5	19,699	19	5	19,527		5	19,347	18	5	19,151	21	5
	19,878	19	5	19,680	19	5	19,507	27	5	19,329	20	5	19,130	23	5
	19,859	20	5	19,661	20	5	19,480	13	5	19,309	24	5	19,107		5
	19,839		5	19,641		5	19,467		5	19,285		5			5
	Plug to Plug	83	40	Plug to Plug	65	40	Plug to Plug	78	40	Plug to Plug	84	40	Plug to Plug	100	40
	Frac Plug	20,000	Total Shots	Frac Plug	19,783	Total Shots	Frac Plug	19,630	Total Shots	Frac Plug	19,457	Total Shots	Frac Plug	19,275	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	19,087	20	5	18,908	20	5	18,675	77	5	18,553	20	5	18,372	21	5
	19,062	22	5	18,883	19	5	18,664	16	5	18,530	23	5	18,350	22	5
	19,040	23	5	18,864	25	5	18,648	15	5	18,507	22	5	18,328	24	5
	19,017	22	5	18,839	18	5	18,633	15	5	18,485	23	5	18,304	21	5
	18,995	23	5	18,821	27	5	18,618	15	5	18,462	23	5	18,283	23	5
	18,972	22	5	18,794	17	5	18,603	15	5	18,439	23	5	18,260	22	5
	18,950	22	5	18,777	25	5	18,588	15	5	18,416	23	5	18,238	23	5
	18,928		5	18,752		5	18,573		5	18,393		5	18,215		5
	Plug to Plug	80	40	Plug to Plug	79	40	Plug to Plug	52	40	Plug to Plug	78	40	Plug to Plug	78	40
	Frac Plug	19,097	Total Shots	Frac Plug	18,918	Total Shots	Frac Plug	18,685	Total Shots	Frac Plug	18,563	Total Shots	Frac Plug	18,382	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	18,193	22	5	17,984	20	5	17,838	20	5	17,660	20	5	17,482	20	5
	18,170	54	5	17,972	24	5	17,814	22	5	17,636	23	5	17,457	22	5
	18,116	52	5	17,948	18	5	17,792	23	5	17,613	22	5	17,435	22	5
	18,064	15	5	17,930	18	5	17,769	22	5	17,591	22	5	17,413	22	5
	18,049	15	5	17,912	18	5	17,747	22	5	17,569	22	5	17,391	23	5
	18,034	15	5	17,894	18	5	17,725	22	5	17,547	23	5	17,368	22	5
	18,019	15	5	17,876	18	5	17,703	23	5	17,524	22	5	17,346	22	5
	18,004		5	17,858		5	17,680		5	17,502		5	17,324		5
	Plug to Plug	139	40	Plug to Plug	64	40	Plug to Plug	79	40	Plug to Plug	79	40	Plug to Plug	79	40
	Frac Plug	18,203	Total Shots	Frac Plug	17,994	Total Shots	Frac Plug	17,848	Total Shots	Frac Plug	17,670	Total Shots	Frac Plug	17,492	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	17,304	20	5	17,123	23	5	16,945	22	5	16,767	22	5	16,589	22	5
	17,278	21	5	17,101	22	5	16,923	23	5	16,745	23	5	16,566	22	5
	17,257	22	5	17,079	23	5	16,900	22	5	16,722	22	5	16,544	22	5
	17,235	23	5	17,056	22	5	16,878	22	5	16,700	22	5	16,522	23	5
	17,212	22	5	17,034	22	5	16,856	22	5	16,678	23	5	16,499	22	5
	17,190	22	5	17,012	22	5	16,834	23	5	16,655	22	5	16,477	22	5
	17,168	22	5	16,990	23	5	16,811	22	5	16,633	22	5	16,455	22	5
	17,146		5	16,967		5	16,789		5	16,611		5	16,433		5
	Plug to Plug	79	40	Plug to Plug	77	40	Plug to Plug	77	40	Plug to Plug	77	40	Plug to Plug	77	40
	Frac Plug	17,314	Total Shots	Frac Plug	17,133	Total Shots	Frac Plug	16,955	Total Shots	Frac Plug	16,777	Total Shots	Frac Plug	16,599	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	16,471	-38	5	16,232	22	5	16,055	21	5	15,876	21	5	15,697	30	5
	16,388	22	5	16,210	22	5	16,032	23	5	15,851	20	5	15,673	20	5
	16,366	22	5	16,188	23	5	16,009	22	5	15,831	24	5	15,653	25	5
	16,344	23	5	16,165	22	5	15,987	22	5	15,807	20	5	15,628	20	5
	16,321	22	5	16,143	22	5	15,965	22	5	15,787	25	5	15,608	24	5
	16,299	22	5	16,121	23	5	15,943	23	5	15,762	20	5	15,584	20	5
	16,277	23	5	16,098	22	5	15,920	23	5	15,742	15	5	15,564	26	5
	16,254		5	16,076		5	15,897		5	15,727		5	15,538		5
	Plug to Plug	77	40	Plug to Plug	77	40	Plug to Plug	78	40	Plug to Plug	79	40	Plug to Plug	79	40
	Frac Plug	16,421	Total Shots	Frac Plug	16,242	Total Shots	Frac Plug	16,065	Total Shots	Frac Plug	15,886	Total Shots	Frac Plug	15,707	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	15,518	20	5	15,341	27	5	15,162	25	5	14,982	25	5	14,800	29	5
	15,492	17	5	15,324	28	5	15,143	25	5	14,962	22	5	14,781	19	5
	15,475	27	5	15,296	18	5	15,118	20	5	14,940	22	5	14,762	23	5
	15,448	18	5	15,278	26	5	15,098	24	5	14,918	23	5	14,739	22	5
	15,430	26	5	15,252	19	5	15,074	22	5	14,895	22	5	14,717	22	5
	15,404	18	5	15,233	26	5	15,052	23	5	14,873	22	5	14,695	22	5
	15,386	18	5	15,207	20	5	15,029	22	5	14,851	22	5	14,673	23	5
	15,368		5	15,187		5	15,007		5	14,829		5	14,650		5
	Plug to Plug	80	40	Plug to Plug	73	40	Plug to Plug	74	40	Plug to Plug	74	40	Plug to Plug	71	40
	Frac Plug	15,528	Total Shots	Frac Plug	15,351	Total Shots	Frac Plug	15,172	Total Shots	Frac Plug	14,992	Total Shots	Frac Plug	14,810	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	14,622	28	5	14,444	28	5	14,264	30	5	14,085	31	5	13,907	30	5
	14,602	19	5	14,424	19	5	14,246	19	5	14,067	18	5	13,889	18	5
	14,583	22	5	14,405	22	5	14,227	22	5	14,049	22	5	13,871	23	5
	14,561	22	5	14,383	22	5	14,205	23	5	14,027	23	5	13,848	22	5
	14,539	22	5	14,361	23	5	14,182	22	5	14,004	22	5	13,826	22	5
	14,517	23	5	14,338	22	5	14,160	22	5	13,982	22	5	13,804	23	5
	14,494	22	5	14,316	22	5	14,138	22	5	13,960	23	5	13,781	22	5
	14,472		5	14,294		5	14,116		5	13,937		5	13,759		5
	Plug to Plug	71	40	Plug to Plug	71	40	Plug to Plug	69	40	Plug to Plug	68	40	Plug to Plug	69	40
	Frac Plug	14,632	Total Shots	Frac Plug	14,454	Total Shots	Frac Plug	14,274	Total Shots	Frac Plug	14,095	Total Shots	Frac Plug	13,917	Total Shots

From Bottom to Top		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots
	13,726	33	5	13,559	27	5	13,380	27	5	13,202	25	5	13,021	25	5
	13,709	17	5	13,536	22	5	13,358	22	5	13,180	22	5	12,999	23	5
	13,692	22	5	13,514	22	5	13,336	22	5	13,158	23	5	12,976	23	5
	13,670	22	5	13,492	22	5	13,314	23	5	13,135	22	5	12,953	23	5
	13,648	23	5	13,470	23	5	13,291	22	5	13,113	22	5	12,930	19	5
	13,625	22	5	13,447	22	5	13,269	23	5	13,091	24	5	12,911	19	5
	13,603	17	5	13,425	18	5	13,246	19	5	13,067	21	5	12,892	24	5
	13,586		5	13,407		5	13,227		5	13,048		5	12,868		5
	Plug to Plug	66	40	Plug to Plug	84	40	Plug to Plug	83	40	Plug to Plug	82	40	Plug to Plug	83	40
	Frac Plug	13,736	Total Shots	Frac Plug	13,576	Total Shots	Frac Plug	13,397	Total Shots	Frac Plug	13,217	Total Shots	Frac Plug	13,036	Total Shots