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Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015- 46612		² Pool Code 96101	³ Pool Name SWD; Devonian
⁴ Property Code 326984	⁵ Property Name BIG EDDY UNIT 17 FEDERAL SWD		⁶ Well Number 1
⁷ OGRID No. 260737	⁸ Operator Name XTO PERMIAN OPERATION, LLC.		⁹ Elevation 3,323'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	17	22 S	29 E		1,091	NORTH	1,958	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16	SEC. 7	SEC. 8	SEC. 9	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. 08/07/2020 Signature: <i>Tracie J Cherry</i> Date: Printed Name: Tracie J Cherry E-mail Address: tracie_cherry@xtoenergy.com
		T-22-S R-29-E		
		C	D	
	SEC. 18	SEC. 17	SEC. 16	
	SEC. 19	SEC. 20	SEC. 21	

GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y= 508,267.6
X= 601,821.8
LAT= 32.396910°N
LONG= 104.003442°W

CORNER COORDINATES TABLE
NAD 27 NME

A - Y= 509,363.3 N, X= 601,163.4 E
B - Y= 509,344.5 N, X= 603,781.2 E
C - Y= 506,712.5 N, X= 601,155.0 E
D - Y= 506,695.6 N, X= 603,777.6 E

GEODETIC COORDINATES
NAD 83 NME
SURFACE LOCATION
Y= 508,328.0
X= 643,003.2
LAT= 32.397031°N
LONG= 104.003940°W

CORNER COORDINATES TABLE
NAD 83 NME

A - Y= 509,423.7 N, X= 642,344.8 E
B - Y= 509,404.9 N, X= 644,962.6 E
C - Y= 506,772.9 N, X= 642,336.5 E
D - Y= 506,756.0 N, X= 644,959.1 E

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

1-3-2019
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number

TM 2018082024



Choice Directional Services US Corp.
12024 West County Rd. 128, Odessa,
Texas, USA. 79765
US:432-236-6725

To: New Mexico Energy, Minerals and
Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505 (505) 476-3220

Re: Certified Survey Report / **Big Eddy Unit 17 Federal SWD #1 OH/ 30-015-46612**

Via: Electronic Filing
Via: Electronic Filing

Choice Directional Services, respectfully submits for filing the required directional certified survey performed on the referenced well by Choice Directional Services. Other information required by your office is as follows:

<u>Name & Title of Supervisor</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
James Sheen MWD Coordinator	156' to 14233'	2-3-20 TO 4-21-20	MWD

The directional MWD surveys performed by Choice Directional Services are attached.

Please file this certified survey report. If there are any questions or additional data required, please let me know at your earliest opportunity.

Thank You

Sincerely,

A handwritten signature in black ink, appearing to read "James Sheen", with a stylized flourish at the end.

James Sheen
MWD Manager

SURVEY REPORT

Company: XTO Energy

Survey Company: Choice Directional Drilling

Well: Big Eddy Unit 17 Federal SWD#1

Start Date: 2020/02/03

Location: Eddy County, NM

End Date:

Rig: Citadel 1

Proposed Direction: 0.00

svy	depth	inc	azm	tvd	vs	ns	ew	dls North / South	East / West
Tiein	0.00	0	0	0	0	0	0	0	
1	156.00	0.09	125.97	156.00	-0.07	-0.07	0.10	0.06 0.07 S	0.10 E
2	217.00	0.22	226.51	217.00	-0.18	-0.18	0.05	0.41 0.18 S	0.05 E
3	308.00	0.44	209.64	308.00	-0.60	-0.60	-0.25	0.26 0.60 S	0.25 W
4	340.00	0.22	169.91	340.00	-0.77	-0.77	-0.30	0.95 0.84 S	0.30 W
5	423.00	0.53	209.38	423.00	-1.26	-1.26	-0.46	0.47 1.26 S	0.46 W
6	513.00	0.53	198.74	512.99	-2.02	-2.02	-0.79	0.11 2.02 S	0.79 W
7	605.00	0.62	211.22	604.99	-2.85	-2.85	-1.19	0.17 2.85 S	1.19 W
8	695.00	0.35	212.10	694.98	-3.50	-3.50	-1.59	0.30 3.50 S	1.59 W
9	785.00	0.66	155.41	784.98	-4.20	-4.20	-1.52	0.61 4.20 S	1.52 W
10	877.00	0.57	151.98	876.98	-5.09	-5.09	-1.08	0.11 5.09 S	1.08 W
11	967.00	0.44	143.28	966.97	-5.76	-5.76	-0.67	0.17 5.76 S	0.67 W
12	1057.00	0.40	194.79	1056.97	-6.34	-6.34	-0.54	0.41 6.34 S	0.54 W
13	1148.00	0.35	176.42	1147.97	-6.93	-6.93	-0.60	0.14 6.93 S	0.60 W
14	1240.00	0.26	51.17	1239.97	-7.08	-7.08	-0.42	0.59 7.08 S	0.42 W
15	1332.00	0.26	62.95	1331.97	-6.85	-6.85	-0.07	0.06 6.89 S	0.07 W
16	1423.00	0.09	299.55	1422.97	-6.72	-6.72	0.05	0.35 6.72 S	0.05 E
17	1513.00	0.09	5.56	1512.97	-6.61	-6.61	-0.01	0.11 6.61 S	0.01 W
18	1608.00	0.31	291.64	1607.97	-6.45	-6.45	-0.24	0.31 6.45 S	0.24 W
19	1703.00	0.62	349.82	1702.96	-5.85	-5.85	-0.57	0.55 5.85 S	0.57 W
20	1799.00	0.57	320.29	1798.96	-4.97	-4.97	-0.97	0.32 4.97 S	0.97 W
21	1894.00	0.26	37.37	1893.96	-4.43	-4.43	-1.14	0.60 4.43 S	1.14 W
22	1989.00	0.18	111.55	1988.96	-4.32	-4.32	-0.87	0.29 4.32 S	0.87 W
23	2084.00	0.31	193.20	2083.95	-4.62	-4.62	-0.79	0.35 4.62 S	0.79 W
24	2179.00	0.57	166.75	2178.95	-5.33	-5.33	-0.74	0.34 5.33 S	0.74 S
25	2274.00	1.05	149.70	2273.94	-6.54	-6.54	-0.19	0.56 6.54 S	0.19 W
26	2369.00	0.92	142.05	2368.93	-7.90	-7.90	0.72	0.19 7.90 S	0.72 E
27	2465.00	1.23	124.47	2464.91	-9.09	-9.09	2.04	0.47 9.09 S	2.04 E
28	2560.00	1.27	130.80	2559.89	-10.35	-10.35	3.68	0.15 10.35 S	3.68 E
29	2655.00	1.67	117.44	2654.86	-11.68	-11.68	5.70	0.55 11.68 S	5.70 E
30	2750.00	1.63	108.04	2749.82	-12.73	-12.73	8.22	0.29 12.73 S	8.22 E
31	2846.00	1.23	108.30	2845.79	-13.48	-13.48	10.49	0.42 13.48 S	10.49 E
32	2941.00	1.27	82.73	2940.77	-13.67	-13.67	12.51	0.58 13.67 S	12.51 E
33	2978.00	0.92	89.84	2977.76	-13.61	-13.61	13.21	1.01 13.6 S	13.2 E
34	3052.00	1.19	107.07	3051.75	-13.84	-13.84	14.54	0.56 13.8 S	14.5 E
35	3148.00	0.48	126.67	3147.74	-14.37	-14.37	15.81	0.79 14.4 S	15.8 E
36	3243.00	0.40	316.43	3242.74	-14.37	-14.37	15.91	0.92 14.4 S	15.9 E
37	3338.00	0.35	204.89	3337.73	-14.39	-14.39	15.55	0.65 14.4 S	15.6 E
38	3433.00	0.53	242.33	3432.73	-14.86	-14.86	15.04	0.35 14.86 S	15.0 E
39	3529.00	1.36	305.53	3528.72	-14.40	-14.40	13.72	1.27 14.4 S	13.72 E
40	3624.00	1.85	309.04	3623.68	-12.78	-12.78	11.61	0.53 12.78 S	11.61 E
41	3719.00	1.67	322.58	3718.64	-10.72	-10.72	9.58	0.48 10.72 S	9.58 E
42	3815.00	1.58	318.71	3814.60	-8.61	-8.61	7.86	0.15 8.61 S	7.86 E
43	3910.00	1.54	330.49	3909.56	-6.52	-6.52	6.37	0.34 6.52 S	6.37 E
44	4005.00	1.27	352.55	4004.54	-4.36	-4.36	5.60	0.63 4.36 S	5.6 E
45	4100.00	1.19	347.45	4099.51	-2.35	-2.35	5.25	0.14 2.35 S	5.25 E
46	4196.00	1.58	341.21	4195.49	-0.13	-0.13	4.61	0.43 0.13 S	4.61 E
47	4291.00	1.19	10.39	4290.46	2.08	2.08	4.36	0.83 2.08 N	4.36 E
48	4386.00	1.05	20.76	4385.44	3.87	3.87	4.85	0.26 3.87 N	4.85 E
49	4481.00	1.32	27.09	4480.42	5.65	5.65	5.66	0.32 5.65 N	5.66 E
50	4576.00	0.84	29.73	4575.40	7.23	7.23	6.50	0.51 6.2 N	6.0 E
51	4672.00	0.57	29.99	4671.40	8.26	8.26	7.09	0.28 7.9 N	6.9 E
52	4767.00	1.14	38.87	4766.39	9.40	9.40	7.92	0.61 9.1 N	7.8 E

53	4862.00	0.97	12.15	4861.37	10.93	10.93	8.68	0.54 10.9 N	8.7 E
54	4957.00	0.35	356.68	4956.36	12.00	12.00	8.83	0.67 12.0 N	8.8 E
55	5052.00	0.31	269.58	5051.36	12.29	12.29	8.56	0.48 12.3 N	8.6 E
56	5147.00	0.22	125.26	5146.36	12.18	12.18	8.45	0.53 12.2 N	8.5 E
57	5242.00	0.62	177.03	5241.36	11.56	11.56	8.62	0.54 11.6 N	8.6 E
58	5337.00	0.35	156.91	5336.36	10.78	10.78	8.77	0.33 10.8 N	8.8 E
59	5433.00	0.84	207.88	5432.35	9.89	9.89	8.55	0.70 9.9 N	8.6 E
60	5528.00	0.75	227.57	5527.34	8.86	8.86	7.77	0.30 8.9 N	7.8 E
61	5623.00	0.70	187.49	5622.34	7.86	7.86	7.23	0.53 7.9 N	7.2 E
62	5718.00	0.79	219.92	5717.33	6.78	6.78	6.74	0.45 6.78 N	6.74 E
63	5813.00	0.70	171.41	5812.32	5.71	5.71	6.40	0.65 5.71 N	6.40 E
64	5908.00	0.22	167.01	5907.32	4.96	4.96	6.53	0.51 4.96 N	6.53 E
65	6004.00	0.79	190.04	6003.31	4.12	4.12	6.46	0.62 4.12 N	6.46 E
66	6099.00	0.79	187.14	6098.30	2.83	2.83	6.26	0.04 2.83 N	6.26 E
67	6194.00	0.26	222.12	6193.30	2.02	2.02	6.03	0.63 2.02 N	6.03 E
68	6290.00	0.53	246.82	6289.30	1.68	1.68	5.48	0.33 1.68 N	5.48 E
69	6385.00	0.92	238.56	6384.29	1.11	1.11	4.43	0.42 1.11 N	4.43 E
70	6480.00	0.88	248.40	6479.28	0.45	0.45	3.10	0.17 0.45 N	3.10 E
71	6575.00	0.75	211.66	6574.27	-0.35	-0.35	2.09	0.56 0.35 N	2.09 E
72	6670.00	0.88	251.56	6669.26	-1.11	-1.11	1.07	0.60 1.11 S	1.07 E
73	6766.00	0.79	203.40	6765.25	-1.95	-1.95	0.11	0.71 1.95 S	1.07 E
74	6861.00	1.01	241.90	6860.24	-2.95	-2.95	-0.89	0.66 3.0 S	0.9 W
75	6956.00	0.75	200.24	6955.23	-3.92	-3.92	-1.84	0.71 3.9 S	1.8 W
76	7051.00	1.32	233.63	7050.21	-5.16	-5.16	-2.94	0.85 5.2 S	2.9 W
77	7146.00	0.97	233.55	7145.20	-6.28	-6.28	-4.46	0.37 6.3 S	4.5 W
78	7241.00	1.10	230.91	7240.18	-7.34	-7.34	-5.82	0.15 7.3 S	5.8 W
79	7337.00	0.84	242.25	7336.17	-8.24	-8.24	-7.16	0.34 8.2 S	7.2 W
80	7432.00	0.79	294.89	7431.16	-8.29	-8.29	-8.37	0.76 8.29 S	8.37 W
81	7527.00	0.53	342.09	7526.15	-7.60	-7.60	-9.10	0.61 7.60 S	9.10 W
82	7622.00	0.48	187.75	7621.15	-7.58	-7.58	-9.29	1.04 7.58 S	9.29 W
83	7718.00	0.75	236.62	7717.15	-8.32	-8.32	-9.86	0.59 8.32 S	9.29 W
84	7813.00	0.26	130.36	7812.14	-8.80	-8.80	-10.22	0.91 8.80 S	10.22 W
85	7908.00	0.57	23.57	7907.14	-8.51	-8.51	-9.87	0.73 8.51 S	9.87 W
86	8003.00	0.40	6.52	8002.14	-7.75	-7.75	-9.64	0.23 7.75 S	9.64 W
87	8099.00	0.40	318.71	8098.14	-7.16	-7.16	-9.82	0.34 7.2 S	9.8 W
88	8194.00	0.35	179.67	8193.14	-7.20	-7.20	-10.04	0.74 7.2 S	10.0 W
89	8289.00	0.70	228.62	8288.13	-7.88	-7.88	-10.47	0.57 7.9 S	10.5 W
90	8385.00	0.31	358.61	8384.13	-8.00	-8.00	-10.92	0.97 8.0 S	10.9 W
91	8480.00	0.40	353.43	8479.13	-7.42	-7.42	-10.96	0.10 7.4 S	11.0 W
92	8575.00	0.62	212.19	8574.13	-7.52	-7.52	-11.28	1.02 7.52 S	11.28 W
93	8670.00	0.40	339.89	8669.12	-7.65	-7.65	-11.66	0.97 7.65 S	11.66 W
94	8766.00	0.62	358.70	8765.12	-6.81	-6.81	-11.79	0.29 6.81 S	11.79 W
95	8861.00	0.48	4.06	8860.12	-5.90	-5.90	-11.77	0.16 5.90 S	11.77 W
96	8956.00	0.70	349.03	8955.11	-4.94	-4.94	-11.86	0.28 4.94 S	11.86 W
97	9052.00	0.62	31.49	9051.10	-3.92	-3.92	-11.70	0.50 3.1 S	11.6 W
98	9147.00	0.62	26.21	9146.10	-3.02	-3.02	-11.20	0.06 3.0 S	11.2 W
99	9245.00	0.70	349.03	9244.09	-1.95	-1.95	-11.08	0.44 0.82 S	10.81 W
100	9340.00	0.75	356.68	9339.09	-0.76	-0.76	-11.23	0.11 0.23 N	10.73 W
101	9435.00	0.53	15.49	9434.08	0.28	0.28	-11.15	0.32 1.07 N	10.22 W
102	9530.00	0.70	43.09	9529.07	1.13	1.13	-10.63	0.35 1.85 N	9.30 W
103	9626.00	0.75	55.83	9625.07	1.91	1.91	-9.71	0.18 2.47 N	8.34 W
104	9721.00	0.62	58.73	9720.06	2.53	2.53	-8.76	0.14 2.68 N	7.47 W
105	9816.00	0.53	97.58	9815.06	2.73	2.73	-7.88	0.41 2.42 N	6.73 W
106	9911.00	0.44	123.51	9910.05	2.47	2.47	-7.14	0.25 1.94 N	6.24 W
107	10006.00	0.40	146.89	10005.05	2.00	2.00	-6.66	0.18 1.34 N	5.88 W
108	10102.00	0.44	150.49	10101.05	1.39	1.39	-6.29	0.05 1.39 N	6.29 W
109	10197.00	0.44	182.74	10196.04	0.71	0.71	-6.13	0.26 0.71 N	6.13 W
110	10292.00	0.70	151.98	10291.04	-0.16	-0.16	-5.88	0.41 0.16 S	5.88 W
111	10388.00	1.10	145.30	10387.03	-1.44	-1.44	-5.08	0.43 1.4 S	5.1 W
112	10454.00	1.32	147.50	10453.01	-2.60	-2.60	-4.31	0.34 2.6 S	4.3 W
113	10483.00	1.19	152.77	10482.01	-3.15	-3.15	-3.99	0.60 3.2 S	4.0 W
114	10509.00	1.32	157.08	10508.00	-3.67	-3.67	-3.75	0.62 3.7 S	3.7 W
115	10576.00	1.23	169.30	10574.98	-5.08	-5.08	-3.32	0.43 5.08 S	3.32 W
116	10671.00	0.84	174.83	10669.97	-6.78	-6.78	-3.06	0.42 6.78 S	3.06 W
117	10766.00	0.75	189.78	10764.96	-8.09	-8.09	-3.11	0.24 8.09 S	3.11 W
118	10862.00	0.66	29.11	10860.96	-8.22	-8.22	-2.94	1.45 8.0 S	3.0 W
119	10957.00	1.05	358.09	10955.95	-6.87	-6.87	-2.71	0.62 7.0 S	3.0 W

120	11052.00	0.84	324.86	11050.93	-5.43	-5.43	-3.14	0.61 5.0 S	3.0 W
121	11147.00	1.19	341.48	11145.92	-3.93	-3.93	-3.85	0.48 4.0 S	4.0 W
122	11243.00	1.23	333.74	11241.90	-2.06	-2.06	-4.62	0.18 2.0 S	5.0 W
123	11338.00	0.84	326.18	11336.88	-0.57	-0.57	-5.46	0.43 1.0 S	5.0 W
124	11433.00	0.62	314.41	11431.87	0.37	0.37	-6.22	0.28 0.0 N/S	6.0 W
125	11529.00	0.31	301.40	11527.87	0.87	0.87	-6.81	0.34 0.87 N	6.81 W
126	11624.00	0.40	290.06	11622.87	1.12	1.12	-7.34	0.12 1.12 N	7.34 W
127	11719.00	0.35	53.55	11717.87	1.40	1.40	-7.42	0.70 1.40 N	7.42 W
128	11815.00	0.48	70.33	11813.87	1.71	1.71	-6.80	0.18 1.71 N	6.80 W
129	11918.00	0.31	55.04	11916.86	2.02	2.02	-6.17	0.19 2.02 N	6.17 W
130	12014.00	0.04	203.31	12012.86	2.14	2.14	-5.97	0.36 2.14 N	5.97 W
131	12109.00	0.18	21.11	12107.86	2.24	2.24	-5.93	0.23 2.24 N	5.93 W
132	12204.00	0.09	180.20	12202.86	2.31	2.31	-5.88	0.28 2.31 N	5.88 W
133	12300.00	0.22	288.65	12298.86	2.29	2.29	-6.05	0.27 2.29 N	6.05 W
134	12395.00	0.18	260.62	12393.86	2.33	2.33	-6.37	0.11 2.33 N	6.37 W
135	12490.00	0.22	0.55	12488.86	2.48	2.48	-6.52	0.32 2.48 N	6.52 W
136	12586.00	0.48	312.12	12584.86	2.94	2.94	-6.81	0.39 2.94 N	6.81 W
137	12681.00	0.35	349.91	12679.86	3.49	3.49	-7.16	0.31 3.49 N	7.16 W
138	12776.00	0.44	317.66	12774.85	4.05	4.05	-7.46	0.25 4.05 N	7.46 W
139	12871.00	0.48	347.19	12869.85	4.70	4.70	-7.79	0.25 4.70 N	7.79 W
140	12966.00	0.57	10.13	12964.85	5.56	5.56	-7.79	0.24 5.56 N	7.79 W
141	13061.00	0.13	101.62	13059.85	6.00	6.00	-7.61	0.62 6.00 N	7.61 W
142	13157.00	0.35	160.60	13155.85	5.70	5.70	-7.40	0.32 5.70 N	7.40 W
143	13251.00	0.18	122.98	13249.84	5.35	5.35	-7.18	0.25 5.35 N	7.18 W
144	13347.00	0.26	216.06	13345.84	5.09	5.09	-7.18	0.34 5.09 N	7.18 W
145	13442.00	0.35	267.65	13440.84	4.91	4.91	-7.60	0.29 4.90 N	7.63 W
146	13537.00	0.18	292.26	13535.84	4.95	4.95	-8.03	0.21 4.95 N	8.03 W
147	13633.00	0.44	294.37	13631.84	5.16	5.16	-8.50	0.27 5.16 N	8.50 W
148	13728.00	0.62	275.73	13726.84	5.36	5.36	-9.35	0.26 5.36 N	9.35 W
149	13823.00	0.40	306.41	13821.83	5.61	5.61	-10.13	0.36 5.61 N	10.13 W
150	13918.00	0.62	303.68	13916.83	6.09	6.09	-10.82	0.23 6.09 N	10.82 W
151	14014.00	0.70	315.90	14012.82	6.80	6.80	-11.66	0.17 6.80 N	11.66 W
152	14109.00	0.66	311.77	14107.82	7.58	7.58	-12.47	0.07 7.58 N	12.47 W
153	14204.00	0.44	270.64	14202.81	7.95	7.95	-13.25	0.46 7.95 N	13.25 W
154	14233.00	0.44	288.13	14231.81	7.99	7.99	-13.46	0.46 7.99 N	13.46 W



Choice Directional Services US Corp.
12024 West County Rd. 128, Odessa,
Texas, USA. 79765
US:432-236-6725

To: New Mexico Energy, Minerals and
Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505 (505) 476-3220

Re: Certified Survey Report / **Big Eddy Unit 17 Federal SWD #1 ST/ 30-015-46612**

Via: Electronic Filing
Via: Electronic Filing

Choice Directional Services, respectfully submits for filing the required directional certified survey performed on the referenced well by Choice Directional Services. Other information required by your office is as follows:

<u>Name & Title of Supervisor</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
James Sheen MWD Coordinator	10902' to 15037'	02-3-20 TO 04-21-20	MWD

The directional MWD surveys performed by Choice Directional Services are attached.

Please file this certified survey report. If there are any questions or additional data required, please let me know at your earliest opportunity.

Thank You

Sincerely,

A handwritten signature in black ink, appearing to read "James Sheen", written over a horizontal line.

James Sheen
MWD Manager

SURVEY REPORT

Company: XTO Energy

Well: Big Eddy Unit 17 Federal SWD#1

Location: Eddy County, NM

Rig: Citadel 1

Survey Company: Choice Directional Drilling

Start Date: 2020/02/03

End Date:

Proposed Direction: 0.00

	svy	depth	inc	azm	tvd	vs	ns	ew	dls North / South	East / West
	Tiein	0.00	0	0	0	0	0	0	0	
1		156.00	0.09	125.97	156.00	-0.07	-0.07	0.10	0.06 0.07 S	0.10 E
2		217.00	0.22	226.51	217.00	-0.18	-0.18	0.05	0.41 0.18 S	0.05 E
3		308.00	0.44	209.64	308.00	-0.60	-0.60	-0.25	0.26 0.60 S	0.25 W
4		340.00	0.22	169.91	340.00	-0.77	-0.77	-0.30	0.95 0.84 S	0.30 W
5		423.00	0.53	209.38	423.00	-1.26	-1.26	-0.46	0.47 1.26 S	0.46 W
6		513.00	0.53	198.74	512.99	-2.02	-2.02	-0.79	0.11 2.02 S	0.79 W
7		605.00	0.62	211.22	604.99	-2.85	-2.85	-1.19	0.17 2.85 S	1.19 W
8		695.00	0.35	212.10	694.98	-3.50	-3.50	-1.59	0.30 3.50 S	1.59 W
9		785.00	0.66	155.41	784.98	-4.20	-4.20	-1.52	0.61 4.20 S	1.52 W
10		877.00	0.57	151.98	876.98	-5.09	-5.09	-1.08	0.11 5.09 S	1.08 W
11		967.00	0.44	143.28	966.97	-5.76	-5.76	-0.67	0.17 5.76 S	0.67 W
12		1057.00	0.40	194.79	1056.97	-6.34	-6.34	-0.54	0.41 6.34 S	0.54 W
13		1148.00	0.35	176.42	1147.97	-6.93	-6.93	-0.60	0.14 6.93 S	0.60 W
14		1240.00	0.26	51.17	1239.97	-7.08	-7.08	-0.42	0.59 7.08 S	0.42 W
15		1332.00	0.26	62.95	1331.97	-6.85	-6.85	-0.07	0.06 6.89 S	0.07 W
16		1423.00	0.09	299.55	1422.97	-6.72	-6.72	0.05	0.35 6.72 S	0.05 E
17		1513.00	0.09	5.56	1512.97	-6.61	-6.61	-0.01	0.11 6.61 S	0.01 W
18		1608.00	0.31	291.64	1607.97	-6.45	-6.45	-0.24	0.31 6.45 S	0.24 W
19		1703.00	0.62	349.82	1702.96	-5.85	-5.85	-0.57	0.55 5.85 S	0.57 W
20		1799.00	0.57	320.29	1798.96	-4.97	-4.97	-0.97	0.32 4.97 S	0.97 W
21		1894.00	0.26	37.37	1893.96	-4.43	-4.43	-1.14	0.60 4.43 S	1.14 W
22		1989.00	0.18	111.55	1988.96	-4.32	-4.32	-0.87	0.29 4.32 S	0.87 W
23		2084.00	0.31	193.20	2083.95	-4.62	-4.62	-0.79	0.35 4.62 S	0.79 W
24		2179.00	0.57	166.75	2178.95	-5.33	-5.33	-0.74	0.34 5.33 S	0.74 S
25		2274.00	1.05	149.70	2273.94	-6.54	-6.54	-0.19	0.56 6.54 S	0.19 W
26		2369.00	0.92	142.05	2368.93	-7.90	-7.90	0.72	0.19 7.90 S	0.72 E
27		2465.00	1.23	124.47	2464.91	-9.09	-9.09	2.04	0.47 9.09 S	2.04 E
28		2560.00	1.27	130.80	2559.89	-10.35	-10.35	3.68	0.15 10.35 S	3.68 E
29		2655.00	1.67	117.44	2654.86	-11.68	-11.68	5.70	0.55 11.68 S	5.70 E
30		2750.00	1.63	108.04	2749.82	-12.73	-12.73	8.22	0.29 12.73 S	8.22 E
31		2846.00	1.23	108.30	2845.79	-13.48	-13.48	10.49	0.42 13.48 S	10.49 E
32		2941.00	1.27	82.73	2940.77	-13.67	-13.67	12.51	0.58 13.67 S	12.51 E
33		2978.00	0.92	89.84	2977.76	-13.61	-13.61	13.21	1.01 13.6 S	13.2 E
34		3052.00	1.19	107.07	3051.75	-13.84	-13.84	14.54	0.56 13.8 S	14.5 E
35		3148.00	0.48	126.67	3147.74	-14.37	-14.37	15.81	0.79 14.4 S	15.8 E
36		3243.00	0.40	316.43	3242.74	-14.37	-14.37	15.91	0.92 14.4 S	15.9 E
37		3338.00	0.35	204.89	3337.73	-14.39	-14.39	15.55	0.65 14.4 S	15.6 E
38		3433.00	0.53	242.33	3432.73	-14.86	-14.86	15.04	0.35 14.86 S	15.0 E
39		3529.00	1.36	305.53	3528.72	-14.40	-14.40	13.72	1.27 14.4 S	13.72 E
40		3624.00	1.85	309.04	3623.68	-12.78	-12.78	11.61	0.53 12.78 S	11.61 E
41		3719.00	1.67	322.58	3718.64	-10.72	-10.72	9.58	0.48 10.72 S	9.58 E
42		3815.00	1.58	318.71	3814.60	-8.61	-8.61	7.86	0.15 8.61 S	7.86 E
43		3910.00	1.54	330.49	3909.56	-6.52	-6.52	6.37	0.34 6.52 S	6.37 E
44		4005.00	1.27	352.55	4004.54	-4.36	-4.36	5.60	0.63 4.36 S	5.6 E
45		4100.00	1.19	347.45	4099.51	-2.35	-2.35	5.25	0.14 2.35 S	5.25 E
46		4196.00	1.58	341.21	4195.49	-0.13	-0.13	4.61	0.43 0.13 S	4.61 E
47		4291.00	1.19	10.39	4290.46	2.08	2.08	4.36	0.83 2.08 N	4.36 E
48		4386.00	1.05	20.76	4385.44	3.87	3.87	4.85	0.26 3.87 N	4.85 E
49		4481.00	1.32	27.09	4480.42	5.65	5.65	5.66	0.32 5.65 N	5.66 E
50		4576.00	0.84	29.73	4575.40	7.23	7.23	6.50	0.51 6.2 N	6.0 E
51		4672.00	0.57	29.99	4671.40	8.26	8.26	7.09	0.28 7.9 N	6.9 E
52		4767.00	1.14	38.87	4766.39	9.40	9.40	7.92	0.61 9.1 N	7.8 E
53		4862.00	0.97	12.15	4861.37	10.93	10.93	8.68	0.54 10.9 N	8.7 E
54		4957.00	0.35	356.68	4956.36	12.00	12.00	8.83	0.67 12.0 N	8.8 E

55	5052.00	0.31	269.58	5051.36	12.29	12.29	8.56	0.48 12.3 N	8.6 E
56	5147.00	0.22	125.26	5146.36	12.18	12.18	8.45	0.53 12.2 N	8.5 E
57	5242.00	0.62	177.03	5241.36	11.56	11.56	8.62	0.54 11.6 N	8.6 E
58	5337.00	0.35	156.91	5336.36	10.78	10.78	8.77	0.33 10.8 N	8.8 E
59	5433.00	0.84	207.88	5432.35	9.89	9.89	8.55	0.70 9.9 N	8.6 E
60	5528.00	0.75	227.57	5527.34	8.86	8.86	7.77	0.30 8.9 N	7.8 E
61	5623.00	0.70	187.49	5622.34	7.86	7.86	7.23	0.53 7.9 N	7.2 E
62	5718.00	0.79	219.92	5717.33	6.78	6.78	6.74	0.45 6.78 N	6.74 E
63	5813.00	0.70	171.41	5812.32	5.71	5.71	6.40	0.65 5.71 N	6.40 E
64	5908.00	0.22	167.01	5907.32	4.96	4.96	6.53	0.51 4.96 N	6.53 E
65	6004.00	0.79	190.04	6003.31	4.12	4.12	6.46	0.62 4.12 N	6.46 E
66	6099.00	0.79	187.14	6098.30	2.83	2.83	6.26	0.04 2.83 N	6.26 E
67	6194.00	0.26	222.12	6193.30	2.02	2.02	6.03	0.63 2.02 N	6.03 E
68	6290.00	0.53	246.82	6289.30	1.68	1.68	5.48	0.33 1.68 N	5.48 E
69	6385.00	0.92	238.56	6384.29	1.11	1.11	4.43	0.42 1.11 N	4.43 E
70	6480.00	0.88	248.40	6479.28	0.45	0.45	3.10	0.17 0.45 N	3.10 E
71	6575.00	0.75	211.66	6574.27	-0.35	-0.35	2.09	0.56 0.35 N	2.09 E
72	6670.00	0.88	251.56	6669.26	-1.11	-1.11	1.07	0.60 1.11 S	1.07 E
73	6766.00	0.79	203.40	6765.25	-1.95	-1.95	0.11	0.71 1.95 S	1.07 E
74	6861.00	1.01	241.90	6860.24	-2.95	-2.95	-0.89	0.66 3.0 S	0.9 W
75	6956.00	0.75	200.24	6955.23	-3.92	-3.92	-1.84	0.71 3.9 S	1.8 W
76	7051.00	1.32	233.63	7050.21	-5.16	-5.16	-2.94	0.85 5.2 S	2.9 W
77	7146.00	0.97	233.55	7145.20	-6.28	-6.28	-4.46	0.37 6.3 S	4.5 W
78	7241.00	1.10	230.91	7240.18	-7.34	-7.34	-5.82	0.15 7.3 S	5.8 W
79	7337.00	0.84	242.25	7336.17	-8.24	-8.24	-7.16	0.34 8.2 S	7.2 W
80	7432.00	0.79	294.89	7431.16	-8.29	-8.29	-8.37	0.76 8.29 S	8.37 W
81	7527.00	0.53	342.09	7526.15	-7.60	-7.60	-9.10	0.61 7.60 S	9.10 W
82	7622.00	0.48	187.75	7621.15	-7.58	-7.58	-9.29	1.04 7.58 S	9.29 W
83	7718.00	0.75	236.62	7717.15	-8.32	-8.32	-9.86	0.59 8.32 S	9.29 W
84	7813.00	0.26	130.36	7812.14	-8.80	-8.80	-10.22	0.91 8.80 S	10.22 W
85	7908.00	0.57	23.57	7907.14	-8.51	-8.51	-9.87	0.73 8.51 S	9.87 W
86	8003.00	0.40	6.52	8002.14	-7.75	-7.75	-9.64	0.23 7.75 S	9.64 W
87	8099.00	0.40	318.71	8098.14	-7.16	-7.16	-9.82	0.34 7.2 S	9.8 W
88	8194.00	0.35	179.67	8193.14	-7.20	-7.20	-10.04	0.74 7.2 S	10.0 W
89	8289.00	0.70	228.62	8288.13	-7.88	-7.88	-10.47	0.57 7.9 S	10.5 W
90	8385.00	0.31	358.61	8384.13	-8.00	-8.00	-10.92	0.97 8.0 S	10.9 W
91	8480.00	0.40	353.43	8479.13	-7.42	-7.42	-10.96	0.10 7.4 S	11.0 W
92	8575.00	0.62	212.19	8574.13	-7.52	-7.52	-11.28	1.02 7.52 S	11.28 W
93	8670.00	0.40	339.89	8669.12	-7.65	-7.65	-11.66	0.97 7.65 S	11.66 W
94	8766.00	0.62	358.70	8765.12	-6.81	-6.81	-11.79	0.29 6.81 S	11.79 W
95	8861.00	0.48	4.06	8860.12	-5.90	-5.90	-11.77	0.16 5.90 S	11.77 W
96	8956.00	0.70	349.03	8955.11	-4.94	-4.94	-11.86	0.28 4.94 S	11.86 W
97	9052.00	0.62	31.49	9051.10	-3.92	-3.92	-11.70	0.50 3.1 S	11.6 W
98	9147.00	0.62	26.21	9146.10	-3.02	-3.02	-11.20	0.06 3.0 S	11.2 W
99	9245.00	0.70	349.03	9244.09	-1.95	-1.95	-11.08	0.44 0.82 S	10.81 W
100	9340.00	0.75	356.68	9339.09	-0.76	-0.76	-11.23	0.11 0.23 N	10.73 W
101	9435.00	0.53	15.49	9434.08	0.28	0.28	-11.15	0.32 1.07 N	10.22 W
102	9530.00	0.70	43.09	9529.07	1.13	1.13	-10.63	0.35 1.85 N	9.30 W
103	9626.00	0.75	55.83	9625.07	1.91	1.91	-9.71	0.18 2.47 N	8.34 W
104	9721.00	0.62	58.73	9720.06	2.53	2.53	-8.76	0.14 2.68 N	7.47 W
105	9816.00	0.53	97.58	9815.06	2.73	2.73	-7.88	0.41 2.42 N	6.73 W
106	9911.00	0.44	123.51	9910.05	2.47	2.47	-7.14	0.25 1.94 N	6.24 W
107	10006.00	0.40	146.89	10005.05	2.00	2.00	-6.66	0.18 1.34 N	5.88 W
108	10102.00	0.44	150.49	10101.05	1.39	1.39	-6.29	0.05 1.39 N	6.29 W
109	10197.00	0.44	182.74	10196.04	0.71	0.71	-6.13	0.26 0.71 N	6.13 W
110	10292.00	0.70	151.98	10291.04	-0.16	-0.16	-5.88	0.41 0.16 S	5.88 W
111	10388.00	1.10	145.30	10387.03	-1.44	-1.44	-5.08	0.43 1.4 S	5.1 W
112	10454.00	1.32	147.50	10453.01	-2.60	-2.60	-4.31	0.34 2.6 S	4.3 W
113	10483.00	1.19	152.77	10482.01	-3.15	-3.15	-3.99	0.60 3.2 S	4.0 W
114	10509.00	1.32	157.08	10508.00	-3.67	-3.67	-3.75	0.62 3.7 S	3.7 W
115	10576.00	1.23	169.30	10574.98	-5.08	-5.08	-3.32	0.43 5.08 S	3.32 W
116	10671.00	0.84	174.83	10669.97	-6.78	-6.78	-3.06	0.42 6.78 S	3.06 W
117	10766.00	0.75	189.78	10764.96	-8.09	-8.09	-3.11	0.24 8.09 S	3.11 W
118	10862.00	0.66	29.11	10860.96	-8.22	-8.22	-2.94	1.45 8.22 S	2.94 W
Interpolated Top of WS	10902.00	0.79	12.44	10900.95	-7.75	-7.75	-2.77	0.62 11.65 S	0.45 W
Interpolated Bot of WS	10917.00	1.73	45.00	10915.95	-7.49	-7.49	-2.59	7.64 18.71 S	2.59 E
119	11055.00	2.86	156.03	11053.88	-9.16	-9.16	0.28	2.78 24.82 S	4.95 E
120	11181.00	4.13	157.17	11179.65	-16.22	-16.22	3.32	1.01 16.22 S	3.32 E
121	11276.00	3.78	160.77	11274.42	-22.33	-22.33	5.68	0.45 22.33 S	5.68 E

122	11371.00	3.25	164.55	11369.24	-27.88	-27.88	7.43	0.61 27.88 S	7.43 E
123	11465.00	3.12	161.56	11463.10	-32.88	-32.88	8.95	0.22 32.88 S	8.95 E
124	11560.00	2.77	165.52	11557.97	-37.55	-37.55	10.34	0.43 37.55 S	10.34 E
125	11655.00	1.36	206.04	11652.91	-40.79	-40.79	10.42	2.05 40.79 S	10.42 E
126	11749.00	1.32	217.46	11746.89	-42.65	-42.65	9.27	0.29 42.65 S	9.27 E
127	11844.00	0.31	209.46	11841.87	-43.74	-43.74	8.48	1.07 43.74 S	8.47 E
128	11939.00	0.35	188.63	11936.87	-44.25	-44.25	8.31	0.13 44.25 S	8.30 E
129	12033.00	0.44	226.43	12030.87	-44.78	-44.78	8.00	0.29 44.78 S	8.00 E
130	12127.00	0.57	210.08	12124.87	-45.44	-45.44	7.51	0.21 45.44 S	7.50 E
131	12222.00	0.57	208.06	12219.86	-46.26	-46.26	7.05	0.02 46.26 S	7.04 E
132	12317.00	0.53	223.00	12314.86	-47.00	-47.00	6.53	0.16 47.00 S	6.52 E
133	12412.00	0.35	233.19	12409.86	-47.50	-47.50	5.99	0.21 47.49 S	5.99 E
134	12506.00	0.13	287.42	12503.85	-47.64	-47.64	5.66	0.31 47.64 S	5.66 E
135	12601.00	0.09	295.60	12598.85	-47.57	-47.57	5.49	0.05 47.57 S	5.49 E
136	12696.00	0.31	35.00	12693.85	-47.33	-47.33	5.57	0.35 47.33 S	5.57 E
137	12793.00	0.26	14.26	12790.85	-46.90	-46.90	5.78	0.12 46.90 S	5.77 E
138	12886.00	0.26	353.69	12883.85	-46.49	-46.49	5.81	0.10 46.49 S	5.80 E
139	12981.00	0.18	309.75	12978.85	-46.18	-46.18	5.67	0.19 46.18 S	5.66 E
140	13075.00	0.31	285.23	13072.85	-46.02	-46.02	5.31	0.17 46.01 S	5.30 E
141	13170.00	0.13	294.81	13167.85	-45.90	-45.90	4.96	0.19 45.90 S	4.96 E
142	13264.00	0.04	73.85	13261.85	-45.85	-45.85	4.90	0.17 45.85 S	4.89 E
143	13359.00	0.09	316.95	13356.85	-45.79	-45.79	4.88	0.12 45.79 S	4.88 E
144	13453.00	0.22	311.94	13450.85	-45.61	-45.61	4.69	0.14 45.61 S	4.69 E
145	13548.00	0.31	326.80	13545.85	-45.27	-45.27	4.42	0.12 45.27 S	4.42 E
146	13642.00	0.40	315.90	13639.85	-44.83	-44.83	4.05	0.12 44.83 S	4.05 E
147	13737.00	0.48	327.59	13734.84	-44.25	-44.25	3.61	0.13 44.25 S	3.61 E
148	13832.00	0.48	321.70	13829.84	-43.60	-43.60	3.15	0.05 43.60 S	3.15 E
149	13926.00	0.53	310.01	13923.84	-43.02	-43.02	2.57	0.12 43.02 S	2.57 E
150	14021.00	0.35	313.26	14018.83	-42.53	-42.53	2.02	0.19 42.53 S	2.02 E
151	14115.00	0.44	280.48	14112.83	-42.27	-42.27	1.46	0.25 42.27 S	1.46 E
152	14210.00	0.57	281.62	14207.83	-42.11	-42.11	0.64	0.14 42.11 S	0.64 E
153	14264.00	0.88	275.21	14261.82	-42.02	-42.02	-0.04	0.59 42.02 S	0.04 W
154	14373.00	1.10	270.11	14370.81	-41.94	-41.94	-1.92	0.22 41.94 S	1.92 W
155	14468.00	1.23	269.23	14465.79	-41.95	-41.95	-3.85	0.14 41.95 S	3.85 W
156	14563.00	1.10	269.93	14560.77	-41.97	-41.97	-5.78	0.14 41.97 S	5.78 W
157	14658.00	1.14	269.49	14655.75	-41.98	-41.98	-7.64	0.04 41.98 S	7.64 W
158	14753.00	1.27	258.86	14750.73	-42.19	-42.19	-9.62	0.27 42.19 S	9.62 W
159	14847.00	1.36	256.57	14844.70	-42.65	-42.65	-11.73	0.11 42.65 S	11.73 W
160	14942.00	1.71	258.68	14939.67	-43.19	-43.19	-14.21	0.37 43.19 S	14.21 W
161	15037.00	2.07	257.36	15034.62	-43.84	-43.84	-17.28	0.38 43.84 S	17.28 W