REC'D 09/11/2020 NMOCD

District I

1625 N. French Dr., Hobbs, NM 88240 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 <u>District IV</u>

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AS-DRILLED PLAT

¹ API Number 30-015-4542	² Pool Code 98220 Purple Sage Wolfcamp		
⁴ Property Code	⁵ Pr	operty Name	⁶ Well Number
	CORRAL (CANYON 3-34 FED	128H
⁷ OGRID No.	8 O _l	perator Name	⁹ Elevation
005380	XTO I	ENERGY, INC.	3,035'

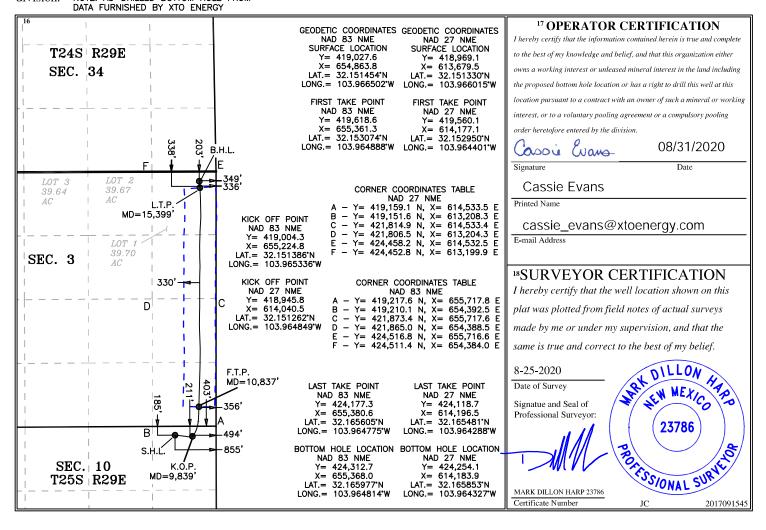
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	10	25 S	29 E		185	NORTH	855	EAST	EDDY

11 Bottom Hole Location If Different From Surface

	Bottom Hole Eccution in 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			
1	3	25 S	29 E		203	NORTH	349	EAST	EDDY			
12 Dedicated Acres	13 Joint o	r Infill	Consolidation	Code 15 Or	der No.							
319.4												

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. NOTE: AS-DRILLED BOTTOM HOLE FROM



Intent	t	As Dril	led X												
API#)15-454	128													
-	rator Nar						erty N							Well Number	
XTC) Energ	y, Incorp	orated			Cor	ral Ca	inyo	n 15	-10 F	ed			128H	
ν: -I. <i>C</i>	>46 D = :+	(KOD)													
	Off Point		Τ_						I _			- 6	Τ_		
UL A	Section 10	Township 25S	Range 29E	Lot	Feet 315		From N North	1/5	Feet 330		Eas	n E/W t	County Eddy		
	Latitude Long 32.151100 -10						906						NAD 83		
32.	151100)			-103	.904	000						03		
First 1	Take Poir	it (FTP)													
UL P							· · · · · · · · · · · · · · · · · · ·			Feet From E _/ B56 East		-	County Eddy		
Latitu		203	Z9E		Longitu	ıde	South	1	336		⊏as	l .	NAD		
32.1	153074	1			-103	964	888						83		
Last T	ake Poin	t (LTP)													
UL	Section 3	Township 25S	Range 29E	Lot 1	Feet 338	Fror Nor	n N/S th	Feet 336		From East	E/W	Count Eddy			
Latitu	ide 165605			'	Longitu		775					NAD 83			
32.	103000)			-103	.904	.775					03			
Is this	well the	defining v	vell for th	e Horiz	ontal Sp	pacing	g Unit?	E	(
ls this	well an	infill well?		N]										
	l is yes p ng Unit.	lease provi	ide API if a	availab	le, Oper	rator	Name	and v	vell n	umber	for l	Definir	ng well fo	r Horizontal	
API#]												
Ope	rator Nar	ne:				Prop	perty N	lame:						Well Number	



State of New Mexico County of Eddy

I, <u>Jeremy Esqueda</u>, certify that: I am employed by WellBenders Directional Services LLC; that I did on the day(s) of <u>January 11, 2019</u> through <u>January 15, 2019</u> conduct or supervise the taking of <u>MWD Directional Survey</u> from a depth of <u>0</u> feet to a depth of <u>3,057</u> feet; that the data is true, correct, complete and within the limitations of the tool as set forth by WellBenders Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of <u>XTO Energy Inc.</u> for the <u>State of New Mexico</u>; Well: <u>Corral Canyon Fed 12H</u> in <u>Eddy County</u>; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by WellBenders Directional Services LLC.

Jeremy Esqueda MWD Manager

Digitally Signed by Jeremy Esqueda

WELLBENDERS DIRECTIONAL SERVICES

SURVEY REPORT

ADD NEW SURVEY

XTO Customer: Lease / Well: Corral Canyon FED 12H Field / Block: Nad-27/East Zone

Directional Co: Targ Meas Depth:

Frontier 27 WELLBENDERS

Targ True Vert. Depth: Magnetic Declination: 6.77 Target Vertical Section: 0.00

		Ľ			-11			9			-1		
					Е	nter your Tie-In	information on the cov	ersheet!					v1.3
DATE	NO.	DEPTH	INC	AZM	CL	TVD	vs	+N / -S	+E / -W	DLS	B / D	WALK	SOURCE
	Tie	0	0.00	0.00	0	0	0.00	0.00 N	0.00 E	0.00	0.00	0.00	Tie IN
	1	146	1.20	207.90	146	145.99	-1.35	1.35 S	0.72 W	0.82	0.82	104.18	WellBenders
	2	231	1.20	222.00	85	230.97	-2.80	2.80 S	1.73 W	0.35	0.00	16.59	WellBenders
	3	327	1.00	237.40	96	326.95	-4.00	4.00 S	3.11 W	0.37	-0.21	16.04	WellBenders
	4	414	1.40	236.10	87	413.93	-5.00	5.00 S	4.63 W	0.46	0.46	-1.49	WellBenders
	5	508	1.50	230.00	94	507.90	-6.43	6.43 S	6.52 W	0.20	0.11	-6.49	WellBenders
	6	593	0.80	252.20	85	592.89	-7.33	7.33 S	7.94 W	0.96	-0.82	26.12	WellBenders
	7	656	0.70	315.00	63	655.88	7.19	7.19 S	8.63 W	1.25	-0.16	99.68	WellBenders
	8	752	1.60	306.20	96	751.86	-5.98	5.98 S	10.13 W	0.95	0.94	-9.17	WellBenders
	9	823	1.70	305.30	71	822.83	-4.79	4.79 S	11.79 W	0.15	0.14	-1.27	WellBenders
	10	911	1.90	298.90	88	910.79	-3.33	3.33 S	14.13 W	0.32	0.23	-7.27	WellBenders
	11	1006	1.80	301.10	95	1005.74	-1.80	1.80 S	16.79 W	0.13	-0.11	2.32	WellBenders
	12	1100	2.00	298.60	94	1099.69	-0.25	0.25 S	19.49 W	0.23	0.21	-2.66	WellBenders
	13	1196	2.10	292.00	96	1195.63	1.21	1.21 N	22.59 W	0.27	0.10	-6.88	WellBenders
	14	1292	2.50	293.90	96	1291.55	2.72	2.72 N	26.14 W	0.42	0.42	1.98	WellBenders
	15	1387	2.70	288.90	95	1386.45	4.28	4.28 N	30.15 W	0.32	0.21	-5.26	WellBenders
	16	1482	3.0	319.6	95	1481.34	6.90	6.90 N	33.88 W	1.62	0.32	32.32	WellBenders
	17	1578	2.6	354.4	96	1577.23	10.98	10.98 N	35.72 W	1.79	-0.42	36.25	WellBenders
	18	1675	2.3	344.5	97	1674.14	15.05	15.05 N	36.45 W	0.53	-0.31	-10.21	WellBenders
	19	1770	2.6	11.1	95	1769.06	19.00	19.00 N	36.55 W	1.23	0.32	-28.00	WellBenders
	20	1866	2.5	9.1	96	1864.96	23.20	23.20 N	35.80 W	0.14	-0.10	2.08	WellBenders
	21	1962	2.4	10.3	96	1960.88	27.25	27.25 N	35.11 W	0.12	-0.10	1.25	WellBenders
	22	2056	2.5	19.9	94	2054.79	31.11	31.11 N	34.06 W	0.45	0.11	10.21	WellBenders
	23	2152	3.4	32.0	96	2150.66	35.49	35.49 N	31.83 W	1.14	0.94	12.60	WellBenders
	24	2247	2.6	26.3	95	2245.53	39.81	39.81 N	29.39 W	0.90	-0.84	-6.00	WellBenders
	25	2343	2.1	350.2	96	2341.46	43.50	43.50 N	28.72 W	1.60	-0.52	37.60	WellBenders
	26	2439	2.1	8.7	96	2437.39	46.97	46.97 N	28.75 W	0.70	0.00	-19.27	WellBenders
	27	2534	1.7	16.2	95	2532.34	50.05	50.05 N	28.10 W	0.49	-0.42	7.89	WellBenders
	28	2629	1.6	339.7	95	2627.30	52.64	52.64 N	28.17 W	1.09	0.11	38.42	WellBenders
	29	2724	1.4	341.3	95	2722.27	54.99	54.99 N	29.00 W	0.22	-0.21	1.68	WellBenders
	30	2819	0.8	2.8	95	2817.25	56.75	56.75 N	29.34 W	0.76	-0.63	-22.63	WellBenders
	31	2914	0.7	4.6	95	2912.25	57.99	57.99 N	29.26 W	0.11	0.11	1.89	WellBenders
	32	3010	1.2	62.1	96	3008.23	59.04	59.04 N	28.32 W	1.06	0.52	59.90	WellBenders
	33	3057	1.2	57.1	47	3055.22	59.54	59.54 N	27.47 W	0.22	0.00	-10.64	WellBenders



XTO ENERGY, INC.

Eddy County, NM Sec 10, T25S, R29E Corral Canyon 10-15 Federal #12H Wellbore #1

Design: Wellbore #1

QES Survey Certification Report

31 January, 2019



Quintana Energy Services

11390 FM 830 Willis, TX 77318

Phone: (936) 856-4332 Fax: (936) 856-8678



Survey Certification Sheet

Company	Job Number	Date
XTO Energy, Inc.	WT-190079	2/6/2019

Lease	Well Name	County & State
SEC 10, T25S, R29E	Corral Canyon 10-15 Federal	Eddy County, NM
	#12H	

API No.	Survey Depth Range	Survey Type
30-015-45429	3057 feet to 19692 feet MD	MWD

Directional Supervisor/Surveyor			
Bill Kitchens			

Certification Statement

The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by Quintana Energy Services (QES). This report represents a true and correct directional survey of this well based on the original data obtained at the well site. Wellbore coordinates are calculated using minimum curvature.

Christopher Hughes
MWD Compliance Manager

Quintana Energy Services



TVD Reference:

MD Reference:



Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

te Reference: Well Corral Canyon 10-15 Federal #12H RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

North Reference: Grid

Survey Calculation Method: Minimum Curvature

Database: EDM 5000.1 Single User Db

Project Eddy County, NM

Map System:US State Plane 1927 (Exact solution)Geo Datum:NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site Sec 10, T25S, R29E

418,642.60 usft Northing: Site Position: Latitude: 32° 9' 1.624 N 611,643.50 usft 103° 58' 21.351 W Map Easting: Longitude: From: 13-3/16" 0.19 ° **Position Uncertainty:** Slot Radius: 0.0 usft **Grid Convergence:**

Well Corral Canyon 10-15 Federal #12H

 Well Position
 +N/-S
 0.0 usft
 Northing:
 418,842.09 usft
 Latitude:
 32° 9' 3.512 N

+E/-W 0.0 usft **Easting**: 614,204.90 usft **Longitude**: 103° 57' 51.549 W

Position Uncertainty 0.0 usft Wellhead Elevation: 0.0 usft Ground Level: 3,028.0 usft

Wellbore #1 Wellbore Declination Dip Angle Field Strength Magnetics **Model Name** Sample Date (°) (nT) (°) IGRF2015 1/15/2019 6.96 59.91 47,693.76642126

Wellbore #1 Design Audit Notes: ACTUAL 0.0 1.0 Tie On Depth: Version: Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 179.79

Survey Program 1/31/2019 То From (usft) (usft) Survey (Wellbore) **Tool Name** Description 146.0 3,057.0 Wellbender Surveys (Wellbore #1) GYRO-NS Gyrocompass Gyro 3,057.0 19,692.0 QES MWD Surveys (Wellbore #1) MWD OWSG MWD - Standard

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth
3,057.0	1.20	57.10	3,055.2	59.5	-27.5	65.6	335.23
Tie In @ 3057.0' N	ID / 3055.2' TVD						
3,156.0	1.10	64.20	3,154.2	60.5	-25.7	65.8	336.95
3,250.0	2.50	359.90	3,248.2	63.0	-24.9	67.7	338.39
3,345.0	3.90	342.30	3,343.0	68.1	-25.9	72.9	339.16
3,440.0	4.10	342.20	3,437.8	74.4	-27.9	79.5	339.42
3,535.0	6.30	338.80	3,532.4	82.5	-30.9	88.1	339.49
3,629.0	7.20	335.10	3,625.7	92.7	-35.2	99.1	339.19
3,725.0	7.70	329.30	3,720.9	103.7	-41.0	111.5	338.40
3,817.0	7.90	328.80	3,812.1	114.4	-47.5	123.8	337.46
3,912.0	7.80	341.80	3,906.2	126.1	-52.8	136.7	337.26





Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Corral Canyon 10-15 Federal #12H

RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

Grid

Minimum Curvature

MD	Inc	Azi (azimuth)	TVD	N/S	E/W	Closure Distance	Closure Azimuth
พบ (usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°)
4,007.0	8.70	343.40	4,000.2	139.1	-56.9	150.3	337
4,102.0	8.50	341.60	4,094.1	152.6	-61.2	164.4	338
4,197.0	9.90	337.90	4,187.9	166.9	-66.5	179.6	338
4,291.0	10.60	337.20	4,280.4	182.3	-72.9	196.3	338
4,387.0	10.60	337.90	4,374.8	198.6	-79.6	214.0	338
4,480.0	10.60	338.10	4,466.2	214.5	-86.0	231.1	338
4,576.0	10.80	339.00	4,560.5	231.1	-92.5	248.9	338
4,672.0	10.40	338.30	4,654.9	247.5	-99.0	266.6	338
4,768.0	8.70	332.80	4,749.6	262.0	-105.5	282.5	338
4,862.0	8.40	331.40	4,842.5	274.4	-112.0	296.4	337
4,958.0	8.00	333.50	4,937.5	286.5	-118.4	310.0	337
5,052.0	7.90	334.90	5,030.6	298.2	-124.0	323.0	337
5,147.0	7.60	335.60	5,124.8	309.9	-129.4	335.8	337
5,241.0	8.20	334.40	5,217.9	321.6	-134.8	348.7	337
5,337.0	10.00	335.80	5,312.6	335.4	-141.2	363.9	33
5,432.0	9.80	336.30	5,406.2	350.3	-147.9	380.2	33
5,527.0	9.10	335.50	5,499.9	364.5	-154.2	395.8	33
5,622.0	8.20	336.30	5,593.9	377.6	-160.1	410.1	33
5,717.0	9.10	333.50	5,687.8	390.5	-166.1	424.4	33
5,812.0	8.40	332.10	5,781.7	403.3	-172.7	438.8	33
5,907.0	8.10	334.40	5,875.7	415.5	-178.9	452.4	33
6,003.0	7.90	336.00	5,970.8	427.6	-184.5	465.7	33
6,097.0	8.80	337.20	6,063.8	440.2	-189.9	479.4	33
6,193.0	11.60	339.30	6,158.2	456.0	-196.1	496.4	33
6,288.0	11.20	339.30	6,251.4	473.5	-202.8	515.1	33
6,383.0	10.30	339.20	6,344.7	490.1	-209.1	532.8	33
6,478.0	9.20	339.30	6,438.3	505.1	-214.8	548.9	33
6,573.0	8.30	338.10	6,532.2	518.6	-220.0	563.3	33
6,666.0	9.40	334.80	6,624.1	531.7	-225.7	577.6	33
6,762.0	9.70	332.00	6,718.8	545.9	-232.9	593.5	33
6,857.0	8.90	329.70	6,812.5	559.4	-240.3	608.8	330
6,952.0	8.80	333.20	6,906.4	572.2	-247.3	623.4	33
7,047.0	9.80	328.80	7,000.1	585.6	-254.8	638.6	330
7,143.0	8.80	323.70	7,094.9	598.5	-263.4	653.9	33
7,237.0	7.60	329.30	7,187.9	609.6	-270.8	667.1	330
7,333.0	7.10	336.00	7,283.1	620.5	-276.5	679.3	33
7,429.0	9.50	343.20	7,378.1	633.5	-281.2	693.1	336
7,524.0	8.40	340.90	7,472.0	647.6	-285.7	707.8	336
7,620.0	7.40	335.60	7,567.1	659.8	-290.5	721.0	336
7,716.0	9.80	335.30	7,662.0	672.9	-296.5	735.3	336
7,810.0	12.80	334.60	7,754.1	689.6	-304.3	753.7	336
7,906.0	11.20	334.80	7,848.0	707.6	-312.9	773.7	336
8,001.0	8.40	341.30	7,941.6	722.5	-319.0	789.8	336
8,097.0	6.70	351.10	8,036.8	734.7	-322.1	802.2	336





Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Corral Canyon 10-15 Federal #12H

RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

Grid

Minimum Curvature

MD	Inc	Azi (azimuth)	TVD	N/S	E/W	Closure Distance	Closure Azimu
(usft) 8,166.0	(°) 5.80	(°) 349.20	(usft) 8,105.4	(usft) 742.1	(usft) -323.4	(usft) 809.5	(°) 33
8,213.0	7.00	349.20 338.10		742.1 747.1	-323.4 -324.9	814.7	33
			8,152.1				33
8,260.0	6.40	311.70	8,198.8	751.5	-327.9	820.0	
8,308.0	5.90	275.50	8,246.5	753.5	-332.4	823.6	33
8,355.0	5.10	226.30	8,293.3	752.3	-336.3	824.1	33
8,403.0	9.20	193.40	8,341.0	747.1	-338.7	820.3	33
8,450.0	14.40	188.20	8,387.0	737.7	-340.5	812.4	33
8,498.0	18.70	191.20	8,433.0	724.2	-342.8	801.2	33
8,545.0	22.20	193.10	8,477.0	708.2	-346.3	788.3	33
8,594.0	24.60	191.00	8,522.0	689.1	-350.3	773.1	33
8,641.0	30.80	185.00	8,563.6	667.5	-353.2	755.2	33
8,689.0	36.50	182.20	8,603.5	641.0	-354.9	732.7	33
8,736.0	41.60	180.80	8,640.0	611.4	-355.6	707.3	32
8,785.0	46.60	180.30	8,675.2	577.3	-355.9	678.2	32
8,832.0	50.60	178.80	8,706.3	542.1	-355.6	648.3	32
8,880.0	54.50	178.70	8,735.4	504.0	-354.8	616.3	32
8,927.0	57.40	178.80	8,761.8	465.0	-354.0	584.4	32
8,975.0	60.80	178.80	8,786.4	423.9	-353.1	551.7	32
9,022.0	63.60	178.30	8,808.3	382.3	-352.0	519.7	31
9,070.0	66.20	177.40	8,828.7	338.9	-350.4	487.5	31
9,117.0	69.70	176.20	8,846.3	295.4	-348.0	456.4	31
9,166.0	74.40	177.40	8,861.4	248.9	-345.4	425.7	30
9,217.0	77.90	179.90	8,873.6	199.4	-344.2	397.8	30
9,261.0	79.80	182.00	8,882.1	156.2	-344.9	378.7	29
9,308.0	82.30	183.90	8,889.5	109.9	-347.3	364.3	28
9,356.0	86.70	184.30	8,894.1	62.2	-350.7	356.2	28
9,403.0	90.70	181.50	8,895.1	15.3	-353.1	353.5	27
9,452.0	91.50	179.70	8,894.2	-33.7	-353.6	355.2	26
9,547.0	94.20	179.20	8,889.5	-128.6	-352.7	375.4	24
9,642.0	91.90	178.70	8,884.4	-223.4	-351.0	416.1	23
9,738.0	89.90	179.70	8,882.9	-319.4	-349.6	473.6	22
9,834.0	89.00	179.60	8,883.8	-415.4	-349.1	542.6	22
9,929.0	89.00	179.60	8,885.5	-510.4	-348.4	617.9	21
10,023.0	89.90	178.70	8,886.4	-604.3	-347.0	696.9	20
10,117.0	91.80	178.10	8,885.0	-698.3	-344.4	778.6	20
10,212.0	90.90	178.80	8,882.7	-793.2	-341.8	863.7	20
10,305.0	88.00	178.30	8,883.6	-886.2	-339.5	949.0	20
10,400.0	88.90	178.00	8,886.2	-981.1	-336.4	1,037.2	19
10,494.0	92.20	179.00	8,885.3	-1,075.0	-333.9	1,125.7	19
10,590.0	89.80	179.40	8,883.6	-1,171.0	-332.6	1,217.3	19
10,685.0	91.20	178.70	8,882.8	-1,266.0	-331.0	1,308.6	19
10,781.0	90.10	180.60	8,881.7	-1,362.0	-330.4	1,401.5	19
10,876.0	89.20	182.50	8,882.3	-1,456.9	-333.0	1,494.5	19
10,972.0	90.60	182.40	8,882.5	-1,552.8	-337.1	1,589.0	19





Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference: RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

Well Corral Canyon 10-15 Federal #12H

Grid

Survey Calculation Method: Minimum Curvature

Database: EDM 5000.1 Single User Db

MD	Inc	Azi (azimuth)	TVD	N/S	E/W	Closure Distance	Closure Azimuth
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°)
11,067.0	90.20	181.80	8,881.8	-1,647.8	-340.6	1,682.6	191.
11,163.0	91.90	181.70	8,880.0	-1,743.7	-343.5	1,777.2	191
11,259.0	90.50	180.80	8,878.0	-1,839.7	-345.6	1,871.8	190
11,355.0	88.90	178.80	8,878.5	-1,935.7	-345.3	1,966.2	190
11,448.0	90.40	178.10	8,879.1	-2,028.6	-342.8	2,057.4	189
11,544.0	92.50	178.30	8,876.7	-2,124.5	-339.7	2,151.5	189
11,639.0	91.00	179.60	8,873.8	-2,219.5	-338.0	2,245.1	188
11,735.0	87.50	181.10	8,875.0	-2,315.4	-338.6	2,340.1	188
11,831.0	89.00	180.40	8,878.0	-2,411.4	-339.8	2,435.2	188
11,927.0	87.70	181.10	8,880.7	-2,507.3	-341.1	2,530.4	187
12,021.0	88.60	181.00	8,883.7	-2,601.3	-342.8	2,623.8	187
12,116.0	91.50	181.30	8,883.7	-2,696.2	-344.7	2,718.2	187
12,211.0	88.50	180.40	8,883.7	-2,791.2	-346.1	2,812.6	187
12,306.0	89.50	179.90	8,885.3	-2,886.2	-346.4	2,906.9	186
12,402.0	90.70	178.80	8,885.2	-2,982.2	-345.3	3,002.1	186
12,495.0	89.10	178.70	8,885.3	-3,075.2	-343.3	3,094.3	186
12,590.0	90.10	178.10	8,886.0	-3,170.1	-340.6	3,188.4	186
12,685.0	92.30	178.30	8,884.0	-3,265.1	-337.6	3,282.5	185
12,780.0	90.40	178.30	8,881.8	-3,360.0	-334.8	3,376.6	185
12,876.0	88.00	179.70	8,883.1	-3,455.9	-333.1	3,472.0	185
12,971.0	89.30	179.60	8,885.3	-3,550.9	- 332.6	3,566.5	185
13,067.0	91.20	179.20	8,884.9	-3,646.9	-331.6	3,661.9	185
13,162.0	88.40	177.40	8,885.2	-3,741.8	-328.7	3,756.3	185
13,258.0	89.50	179.00	8,887.0	-3,837.8	-325.7	3,851.6	184
13,353.0	90.00	176.90	8,887.4	-3,932.7	-322.3	3,945.9	184
13,449.0	91.30	176.20	8,886.3	-4,028.5	-316.5	4,040.9	184
13,545.0	89.50	176.20	8,885.7	-4,124.3	-310.2	4,136.0	184
13,639.0	92.50	176.60	8,884.0	-4,218.1	-304.3	4,229.1	184
13,734.0	88.50	178.00	8,883.2	-4,313.0	-299.8	4,323.4	183
13,829.0	89.30	177.80	8,885.0	-4,407.9	-296.3	4,417.8	183
13,924.0	91.50	179.20	8,884.4	-4,502.8	-293.8	4,512.4	183
14,020.0	89.30	179.20	8,883.7	-4,598.8	-292.5	4,608.1	183
14,113.0	90.80	179.60	8,883.6	-4,691.8	-291.5	4,700.9	183
14,209.0	87.90	178.00	8,884.7	-4,787.8	-289.5	4,796.5	183
14,302.0	90.70	181.10	8,885.8	-4,880.8	-288.8	4,889.3	183
14,398.0	91.80	180.60	8,883.7	-4,976.7	-290.2	4,985.2	183
14,492.0	89.40	181.00	8,882.7	-5,070.7	-291.5	5,079.1	183
14,588.0	92.00	182.40	8,881.6	-5,166.6	-294.4	5,175.0	183
14,683.0	90.30	182.50	8,879.7	-5,261.5	-298.4	5,270.0	183
14,779.0	91.50	182.20	8,878.2	-5,357.4	-302.4	5,366.0	183
14,874.0	88.40	181.00	8,878.2	-5,452.4	-305.0	5,460.9	183
14,969.0	89.60	181.50	8,879.9	-5,547.3	-307.1	5,555.8	183
15,064.0	90.00	181.30	8,880.2	-5,642.3	-309.4	5,650.8	183
15,159.0	90.70	181.30	8,879.7	-5,737.3	-311.6	5,745.7	183





Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Corral Canyon 10-15 Federal #12H

RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

Grid

Minimum Curvature

MD (voft)	Inc (°)	Azi (azimuth)	TVD	N/S	E/W	Closure Distance	Closure Azimu
(usft) 15,255.0	(°) 89.30	(°) 180.80	(usft) 8,879.7	(usft) -5,833.3	(usft) -313.3	(usft) 5,841.7	(°)
15,350.0	89.50	181.00	8,880.6	-5,928.2	-314.8	5,936.6	18
15,330.0	89.60	179.60	8,881.4	-5,926.2 -6,025.2	-314.6		18
15,447.0	90.00	179.50	8,881.7	-6,025.2 -6,120.2	-313.8	6,033.5	18
15,637.0	90.00	176.90	8,881.7	-6,120.2 -6,215.1	-313.6	6,128.3 6,222.9	18
·			·				
15,733.0	89.80	175.00	8,881.9	-6,310.9	-303.2	6,318.2	18
15,828.0	89.30	175.90	8,882.7	-6,405.6	-295.6	6,412.4	18
15,922.0	89.20	177.80	8,883.9	-6,499.4	-290.5	6,505.9	18
16,018.0	87.90	179.20	8,886.3	-6,595.4	-288.0	6,601.7	18
16,113.0	88.20	178.70	8,889.5	-6,690.3	-286.2	6,696.4	18
16,208.0	90.30	180.10	8,890.8	-6,785.3	-285.2	6,791.3	18
16,304.0	89.80	178.50	8,890.7	-6,881.3	-284.0	6,887.1	18
16,399.0	89.20	176.60	8,891.5	-6,976.2	-280.0	6,981.8	18
16,494.0	89.10	179.40	8,892.9	-7,071.1	-276.7	7,076.5	18
16,589.0	91.40	181.30	8,892.5	-7,166.1	-277.2	7,171.4	18
16,684.0	91.80	180.60	8,889.9	-7,261.0	-278.8	7,266.4	18
16,779.0	93.10	180.40	8,885.8	-7,355.9	-279.7	7,361.3	18
16,875.0	90.20	179.00	8,883.1	-7,451.9	-279.1	7,457.1	18
16,970.0	89.70	181.30	8,883.1	-7,546.9	-279.4	7,552.1	18
17,066.0	88.20	180.60	8,884.9	-7,642.9	-281.0	7,648.0	18
17,162.0	88.50	178.50	8,887.7	-7,738.8	- 280.2	7,743.9	18
17,257.0	89.40	180.40	8,889.4	-7,833.8	-279.3	7,838.8	18
17,353.0	91.30	182.90	8,888.8	-7,929.7	-282.1	7,934.7	18
17,448.0	93.10	181.30	8,885.2	-8,024.6	-285.6	8,029.7	18
17,571.0	87.60	181.00	8,884.4	-8,147.5	-288.0	8,152.6	18
17,666.0	89.00 91.00	180.60 180.60	8,887.2 8,887.2	-8,242.5 -8,338.4	-289.4 -290.4	8,247.5	18 18
17,762.0 17,857.0	91.50	180.60	,	-8,433.4	-290.4 -291.4	8,343.5	18
17,057.0	88.50	179.40	8,885.2 8,885.2	-6,433.4 -8,528.4	-291.4 -291.4	8,438.4 8,533.4	18
18,046.0	90.20	179.40	8,886.2	-8,622.4	-291.4	8,627.3	18
18,141.0	92.20	179.00	8,884.2	-8,717.4	-289.0	8,722.1	18
18,236.0	90.80	176.20	8,881.8	-8,812.2	-285.1	8,816.8	18
18,332.0	91.40	175.20	8,879.9	-8,907.9	-277.9	8,912.3	18
18,427.0	89.70	175.90	8,879.0	-9,002.6	-270.5	9,006.7	18
18,522.0	86.80	176.40	8,881.9	-9,097.4	-264.1	9,101.2	18
18,617.0	87.30	181.00	8,886.8	-9,192.2	-262.0	9,195.9	18
18,711.0	87.00	180.80	8,891.5	-9,286.1	-263.5	9,289.8	18
18,808.0	92.90	182.00	8,891.5	-9,383.0	-265.8	9,386.8	18
18,901.0	92.80	181.30	8,886.9	-9,475.8	-268.5	9,479.6	18
18,996.0	90.90	181.70	8,883.9	-9,570.8	-271.0	9,574.6	18
19,091.0	92.50	181.50	8,881.0	-9,665.7	-273.6	9,669.5	18
19,186.0	89.70	181.00	8,879.2	-9,760.6	-275.7	9,764.5	18
19,780.0	90.80	180.80	8,878.8	-9,855.6	-277.2	9,859.5	18
19,376.0	89.70	180.60	8,878.4	-9,950.6	-278.4	9,954.5	18
19,470.0	88.90	179.90	8,879.5	-10,044.6	-278.8	10,048.5	18





Company:XTO ENERGY, INC.Project:Eddy County, NMSite:Sec 10, T25S, R29E

Well: Corral Canyon 10-15 Federal #12H

Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Database:

Well Corral Canyon 10-15 Federal #12H

RKB @ 3055.0usft (Frontier #27) RKB @ 3055.0usft (Frontier #27)

Grid

Minimum Curvature

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth
19,566.0	90.80	180.30	8,879.8	-10,140.6	-278.9	10,144.4	181.58
19,643.0	92.00	180.10	8,877.9	-10,217.6	-279.2	10,221.4	181.57
19,692.0	92.00	180.10	8,876.2	-10,266.5	-279.3	10,270.3	181.56
TD @ 19692 0' ME) / 8876 2' TVD						

Design A	Annotations				
	Measure	d Vertical	Local C	Coordinates	
	Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
	, ,		` '	, ,	
	3,05		59.5		Tie In @ 3057.0' MD / 3055.2' TVD
	19,69	2.0 8,876.2	-10,266.5	-279.3	TD @ 19692.0' MD / 8876.2' TVD

WellBenders Directional Services LLC Client....:XTO Energy (Nad-27 /East Zone) Location....:Eddy County NM Site....:Corral Canyon Federal Well....:#6H Depth reference Permanent datum....:2947.00 datum....:2974.00 Permanent Surface Location (N/S).....:418934.600 (E/W)....:605899.300 Northing Northing MD

ИD	Inc	Azimuth			Subsea N/S		E/W VS	DLS				Latitude	Longitude
	0	0	0	0	-2974	0	0	0	0	605899.3			-103.991155
	175	0.7	307.52	175	-2799	0.65	-0.85	-0.24	0.4		418935.25		
	231 294	0.88 0.88	308.73 304.07	230.99 293.98	-2743.01 -2680.02	1.13	-1.45 -2.23	-0.42 -0.62	0.32	605897.85	418935.73 418936.3		-103.991159 -103.991162
	352	0.88	315.41	351.98	-2680.02 -2622.02	1.7 2.24	-2.23 -2.88	-0.62 -0.84	0.11 0.32				-103.991162
	465	1.01	309.87	464.96	-2509.04	3.43	-2.88 -4.19	-0.84	0.32				-103.991168
	533	0.79	323.06	532.95	-2441.05	4.19	-4.94	-1.77	0.44				-103.991171
	661	0.88	314.27	660.94	-2313.06	5.58	-6.17	-2.52	0.12				-103.991175
	719	0.88	319.89	718.93	-2255.07	6.23	-6.78	-2.86	0.15				-103.991176
	812	1.01	314.44	811.92	-2162.08	7.35	-7.82	-3.45	0.17	605891.48	418941.95	32.151326	-103.99118
	906	1.1	314.44	905.91	-2068.09	8.56	-9.06	-4.04	0.1	605890.24	418943.16	32.151329	-103.991184
	1001	1.32	308.03	1000.88	-1973.12	9.88	-10.57	-4.61	0.27	605888.73	418944.48	32.151333	-103.991189
	1095	1.71		1094.85	-1879.15	11.35	-12.57	-5.12	0.42				-103.991195
	1190	1.58		1189.81	-1784.19	12.93	-14.79	-5.64	0.14				-103.991202
	1284	0.62		1283.79	-1690.21	14.1	-16.15	-6.14	1.07	605883.15			-103.991207
	1380	0.7		1379.79	-1594.21	14.92	-16.89	-6.58	0.14				-103.991209
	1474 1570	0.88 1.4		1473.78 1569.76	-1500.22 -1404.24	15.8 16.1	-17.83 -19.53	-6.99 -6.56	0.19 1.16	605881.47 605879.77	418950.4	32.151349	-103.991212 -103.991218
	1665	1.7		1664.73	-1309.27	15.78	-19.33	-5.21	0.34		418950.38		-103.991216
	1759	2.3		1758.67	-1215.33	15.75	-25.35	-3.83	0.71		418950.35		
	1854	2	263.52	1853.6	-1120.4	15.66	-28.9	-2.28	0.49		418950.26		-103.991248
	1949	1.6		1948.56	-1025.44	14.59	-31.53	-0.21	1.23				-103.991256
	2043	1.7	207.82	2042.52	-931.48	12.48	-33.15	2.38	0.62	605866.15	418947.08	32.15134	-103.991262
	2138	0.8	334.72	2137.51	-836.49	11.83	-34.09	3.36	2.39	605865.21	418946.43	32.151338	-103.991265
	2234	1.3	83.42	2233.5	-740.5	12.56	-33.3	2.37	1.8	605866	418947.16	32.15134	-103.991262
	2329	1.2		2328.47	-645.53	13.05	-31.3	1.09	0.36	605868			-103.991256
	2425	2		2424.44	-549.56	13.54	-28.7	-0.43	0.97				-103.991247
	2519	3.6		2518.32	-455.68	13.6	-24.11	-2.38	1.72	605875.19			-103.991232
	2613	3.5		2612.15	-361.85	12.46	-18.5	-3.68	1.4		418947.06		-103.991214
	2706 2801	5.1 4.1		2704.88 2799.57	-269.12 -174.43	9.33 5.74	-12.29 -5.57	-3.4 -2.92	1.82 1.1				-103.991194 -103.991173
	2829	3.9		2827.51	-174.43 -146.49	4.86	-3.83	-2.92 -2.83	0.87				-103.991173
	2933	3.1		2931.31	-42.69	1.79	1.73	-2.35	0.78		418936.39		-103.991149
	3028	3		3026.18	52.18	-0.75	6.09	-1.84	0.11		418933.85		
	3124	3		3122.05	148.05	-3.32	10.41	-1.3	0.02				-103.991121
	3219	2.6	137.22	3216.93	242.93	-6.18	14.01	-0.19	0.93	605913.31	418928.42	32.151288	-103.991109
	3311	2.4	141.82	3308.85	334.85	-9.22	16.62	1.51	0.31	605915.92	418925.38	32.15128	-103.991101
	3406	2.3	155.22	3403.77	429.77	-12.52	18.65	3.66	0.59	605917.95	418922.08	32.151271	-103.991095
	3501	1.8		3498.71	524.71	-15.74	19.43	6.27	1.08				-103.991092
	3596	1.7		3593.66	619.66	-18.64	19.4	8.92	0.11				-103.991092
	3690	1.7		3687.62	713.62	-21.41	19.2	11.53	0.25		418913.19		
	3787 3882	1.8		3784.58 3879.53	810.58 905.53	-24.25 -27.02	18.44 17.6	14.43 17.3	0.44 0.34		418910.35		-103.991095 -103.991098
	3976	1.7 1.9		3973.49	999.49	-27.02	16.33	20.16	0.95				-103.991098
	4072	1.8		4069.44	1095.44	-31.9	14.27	23.12	0.33	605913.57			-103.991102
	4167	1.8		4164.39	1190.39	-33.94	12.1	25.88	0.18				-103.991116
	4263	1.8		4260.34	1286.34	-35.87	9.78	28.59	0.05	605909.08			-103.991123
	4356	1.7	234.82	4353.3	1379.3	-37.59	7.52	31.09	0.16				-103.991131
	4452	1.4	233.32	4449.27	1475.27	-39.11	5.41	33.35	0.32	605904.71	418895.49	32.151198	-103.991138
	4548	1.2	210.92	4545.24	1571.24	-40.67	3.96	35.37	0.56	605903.26	418893.93	32.151194	-103.991142
	4644	1.6	214.72	4641.21	1667.21	-42.63	2.68	37.69	0.43	605901.98	418891.97	32.151188	-103.991146
	4739	1.7		4736.17	1762.17	-44.88	1.12	40.38	0.11				-103.991151
	4835	1.9		4832.13	1858.13	-47.35	-0.62	43.35	0.21				-103.991157
	4931	2		4928.07	1954.07	-49.91	-2.64	46.52	0.21				-103.991164
	5026	2.1		5023.01	2049.01	-52.43	-4.91	49.76	0.14				-103.991171
	5122	2.1		5118.95	2144.95	-55.19	-7.08 0.1	53.16	0.37				-103.991178
	5218 5313	2.1 2.4		5214.88 5309.81	2240.88 2335.81	-58.06 -60.94	-9.1 -11.48	56.62 60.21	0.14 0.37				-103.991185 -103.991192
	5406	2.4		5402.73	2428.73	-63.88	-11.48 -14.02	60.21 63.95	0.37				-103.991192
	5502	2.4		5498.64	2524.64	-66.86	-16.72	67.78	0.19				-103.991209
	5598	2.4		5594.56	2620.56		-19.37	71.62	0.24				-103.991218

WellBenders Directional Services LLC

Client	County		(Nad-27	/East Zone)								
	Depth	reference										
Permanent	datum	:2947.00										
Permanent	datum	:2974.00										
	Surface	Location										
Northing		.:418934.600										
Northing		:605899.300										
Northing	(L/ VV)	003033.300										
MD	Inc	Azimuth	TVD	Subsea	N/S	E/W	VS	DLS X		Υ	Latitude	Longitude
5692	2 2.2	216.12	5688.48	2714.48	-72.87	-21.66	75.3	0.24	605877.64	418861.73	32.151105	-103.991225
5788	3 2.6	209.62	5784.4	2810.4	-76.25	-23.83	79.27	0.5	605875.47	418858.35	32.151096	-103.991232
5884	4 2.5	225.12	5880.3	2906.3	-79.62	-26.39	83.4	0.72	605872.91	418854.98	32.151087	-103.991241
5978	3 1.6	226.72	5974.24	3000.24	-81.97	-28.8	86.53	0.96	605870.5	418852.63	32.15108	-103.991249
6074	1.9	215.62	6070.2	3096.2	-84.18	-30.7	89.33	0.47	605868.6	418850.42	32.151074	-103.991255
6168	3 1.9	214.82	6164.15	3190.15	-86.73	-32.49	92.4	0.03	605866.81	418847.87	32.151067	-103.991261
6263	3 2	212.62	6259.09	3285.09	-89.42	-34.29	95.59	0.13	605865.01	418845.18	32.15106	-103.991266
6358	3 1.9	205.12	6354.04	3380.04	-92.24	-35.85	98.8	0.29	605863.45	418842.36	32.151052	-103.991271
6454	1.7	203.32	6449.99	3475.99	-94.99	-37.09	101.82	0.22	605862.21	418839.61	32.151045	-103.991275
6546	5 1.5	217.02	6541.95	3567.95	-97.2	-38.35	104.36	0.47	605860.95	418837.4	32.151039	-103.99128

3663.92

3757.9

3852.89

3948.87

4043.83

4139.75

4235.68

4331.66

4421.64

4517.61

4613.56

4708.52

4751.51

-99.22

-100.88

-101.58

-101.09

-100.14

-102.52

-109.62

-112.1

-100.18 -50.65

-101.07 -53.87

-104.52 -55.25

-106.91 -54.55

-112.96 -51.43

-39.7

-40.89

-42.41

-44.2

-46.74

-55.16

-53.24

-51.9

106.75

108.75

110.02

110.32

110.51

112.17

114.31

116.16

118.02

119.9

121.83

123.53

124.12

0.2

0.42

0.91

0.67

1.05

1.32

1.49

1.23

0.6

0.54

0.31

0.42

0.93

-103.991288

-103.99133

-103.991328

605859.6 418835.38 32.151033 -103.991284

605856.89 418833.02 32.151027 -103.991293

605852.56 418834.46 32.151031 -103.991307

605848.65 418834.42 32.15103 -103.991319

605844.14 418832.08 32.151024 -103.991334

605844.05 418830.08 32.151019 -103.991334

605844.75 418827.69 32.151012 -103.991332

605847.4 418822.5 32.150998 -103.991323

605847.87 418821.64 32.150995 -103.991322

605855.1 418833.51 32.151028 -103.991298

605858.41 418833.72 32.151028

605845.43 418833.53 32.151028

605846.06 418824.98 32.151005

All data are in feet unlsess otherwise stated. Directions and coordinates are relative to Grid North.

Vertical depths are relative to RKB=27'. Northings and Eastings are relative to well.

1.4

1.1

1.1

1.2

2.1

2.7

1.3

1.3

1.3

1.7

1.9

1.5

1.1

The Dogleg severity is in degrees per 100 feet.

6642

6736

6831

6927

7022

7118

7214

7310

7400

7496

7592

7687

7730

Vertical section is from slot and calculated along an azimuth of 204.481- (Grid).

Coordinate system is NAD 1927 (NADCO CONUS) US State Plane 1927 (Exact solution) New Mexico East 3001 Central Meridian is -10433-.

Grid convergence at surface is 0.182-.

Based upon minimum curvature type calculations at a measured depth of 7730.00 ft. the bottom hole displacement is 12.12 ft in the direction of 204.481- (Grid).

210.42 6637.92

268.52 6826.89

300.52 6922.87

284.72 7017.83

257.52 7113.75

248.62 7209.68

194.72 7305.66

170.62 7395.64

158.12 7491.61

151.02 7587.56

151.92 7682.52

151.02 7725.51

6731.9

222.02