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FEB 13 2020

Form C-102

Revised August 1, 2011

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
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

AMRD-OGD ARTESIA

to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT AS-DRILLED PLAT

¹ API Number 30-015-45591		² Pool Code 98220		³ Pool Name PURPLE SAGE; WOLFCAMP	
⁴ Property Code 321151		⁵ Property Name ROSS DRAW 25-36 FED COM			⁶ Well Number 161H
⁷ OGRID No. 005380		⁸ Operator Name XTO ENERGY, INC.			⁹ Elevation 2,928'

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
D	25	26 S	29 E		170	NORTH	305	WEST	EDDY

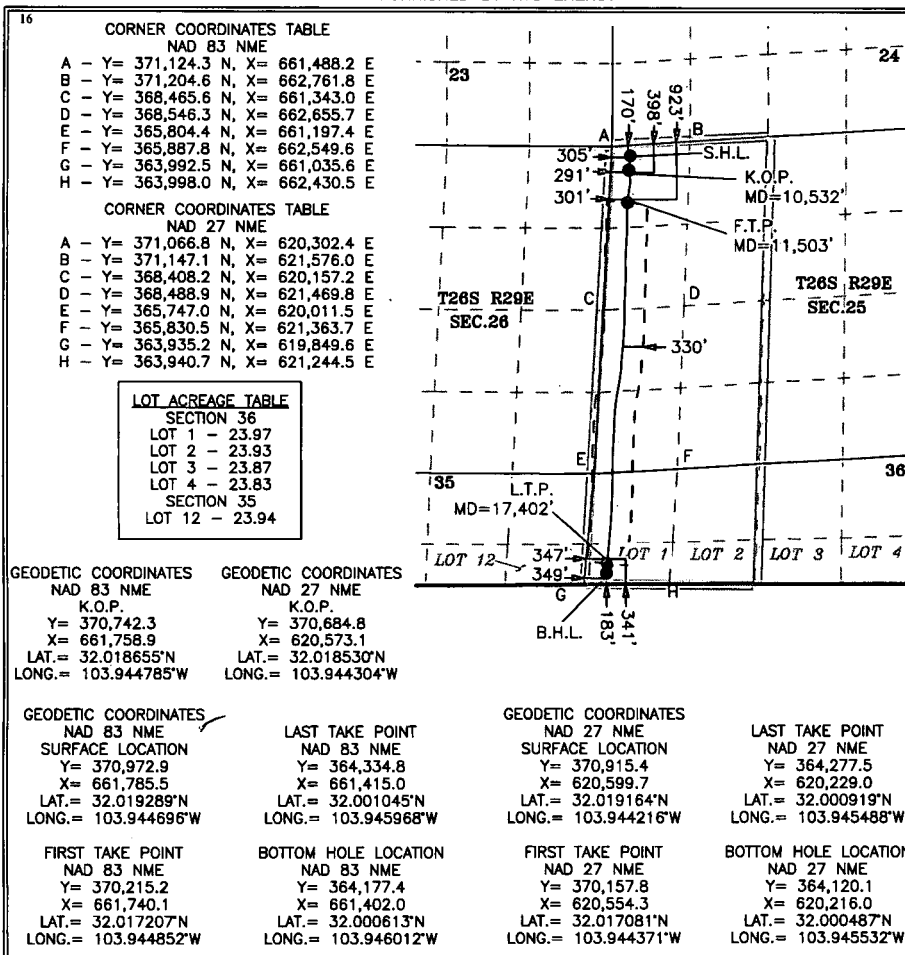
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L1	36	26 S	29 E		183	SOUTH	349	WEST	EDDY

¹² Dedicated Acres 447.9	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.

NOTE: AS-DRILLED BOTTOM HOLE PLOTTED
FROM DATA FURNISHED BY XTO ENERGY



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.

Signature: Cheryl Rowell Date: 2/7/20

Printed Name: CHERYL ROWELL

E-mail Address: cheryl_rowell@xtoenergy.com

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.

2-6-2020

Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP 23786

Certificate Number

RR/JC

2018112756



RW 4-21-2020

Intent ☐ As Drilled ☒

API #
30-015-45591

Operator Name:
XTO ENERGY INC.

Property Name:
ROSS DRAW 25-36 FED

Well Number
161H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	25	26S	29E		398	FNL	291	FWL	EDDY
Latitude					Longitude			NAD	
32.018655					103.944785			83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	25	26S	29E		923	FNL	301	FWL	EDDY
Latitude					Longitude			NAD	
32.017207					103.944852			83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
L1	36	26S	29E		341	FSL	347	FWL	EDDY
Latitude					Longitude			NAD	
32.001045					103.945968			83	

Is this well the defining well for the Horizontal Spacing Unit?

☐ NO

Is this well an infill well?

☐ YES

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-015-45585

Operator Name:
XTO Energy Inc.

Property Name:
Ross Draw 25 36 Federal Com

Well Number
102H

KZ 06/29/2018



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EMNRD-OCD ARTESIA

I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **02/08/19** thru **04/03/19** conduct or supervise the taking of a **MWD Survey** from a depth of **117'** to a depth of **13600'** and from a depth of **12005'** to a depth of **17560'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **XTO Energy Inc** for the **Ross Draw 25-36 Fed West 161H** API No. **30-015-45591** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright

Larry
Wright

Digitally signed
by Larry Wright
Date:
2020.01.09
09:24:34 -06'00'

13901 Hwy 105W, Conroe, Texas
77304
PH 936-539-9602



XTO Energy

Eddy County, NM (Nad-27 / East Zone)

Ross Draw 25-36 Fed West

161H

ST01

Design: ST01

End Of Well Report

09 January, 2020





End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Project	Eddy County, NM (Nad-27 / East Zone)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Ross Draw 25-36 Fed West
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Site Position:		Northing:	364,267.03 usft	Latitude:	32.000890
From:	Lat/Long	Easting:	620,303.01 usft	Longitude:	-103.945250
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.206 °

Well	161H					
Well Position	+N/-S	0.00 usft	Northing:	370,915.40 usft	Latitude:	32.019164
	+E/-W	0.00 usft	Easting:	620,599.70 usft	Longitude:	-103.944216
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,928.00 usft

Wellbore	ST01
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	03/24/19	6.920	59.792	47,599.54071322

Design	ST01
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Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	11,926.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	183.23	



End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Survey Program		Date	01/09/20		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
117.00	11,926.00	Survey #1 (OH)	WBDS_IGRF	OWSG MWD + IGRF or WMM	
12,005.00	17,560.00	Survey #1 (ST01)	WBDS_IGRF	OWSG MWD + IGRF or WMM	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	0.70	129.70	117.00	-0.46	0.55	0.42	117.00	129.70	0.60
180.00	1.10	273.00	179.99	-0.67	0.24	0.66	63.00	235.17	2.72
275.00	1.50	297.10	274.97	-0.06	-1.78	0.16	95.00	286.93	0.70
369.00	1.00	303.00	368.95	0.95	-3.56	-0.75	94.00	299.46	0.55
464.00	1.70	287.60	463.92	1.83	-5.60	-1.51	95.00	293.29	0.82
527.00	1.90	283.50	526.89	2.35	-7.50	-1.93	63.00	285.44	0.38
622.00	2.10	291.80	621.83	3.37	-10.65	-2.76	95.00	287.86	0.37
717.00	2.40	288.80	716.76	4.66	-14.15	-3.85	95.00	290.20	0.34
812.00	2.20	288.80	811.68	5.88	-17.76	-4.87	95.00	288.80	0.21
907.00	2.50	288.80	906.60	7.14	-21.45	-5.92	95.00	288.80	0.32
1,001.00	2.50	295.90	1,000.51	8.70	-25.23	-7.26	94.00	292.35	0.33
1,191.00	2.50	294.20	1,190.33	12.20	-32.74	-10.34	190.00	295.05	0.04
1,286.00	2.10	282.80	1,285.26	13.44	-36.33	-11.37	95.00	289.00	0.64
1,380.00	2.00	267.50	1,379.20	13.75	-39.64	-11.49	94.00	275.34	0.59
1,476.00	2.20	263.80	1,475.13	13.48	-43.15	-11.02	96.00	265.56	0.25
1,571.00	2.20	264.70	1,570.06	13.11	-46.78	-10.45	95.00	264.25	0.04
1,666.00	1.60	235.90	1,665.01	12.20	-49.69	-9.38	95.00	252.62	1.17
1,761.00	1.10	229.80	1,759.98	10.87	-51.49	-7.95	95.00	233.42	0.55
1,857.00	1.20	239.60	1,855.96	9.76	-53.06	-6.76	96.00	234.91	0.23
1,952.00	0.30	167.30	1,950.96	9.02	-53.86	-5.97	95.00	227.12	1.21



End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Ross Draw 25-36 Fed West
Well: 161H
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well 161H
TVD Reference: RKB=23' @ 2951.00usft (Frontier 17)
MD Reference: RKB=23' @ 2951.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
2,047.00	0.50	137.20	2,045.95	8.47	-53.52	-5.44	95.00	148.40	0.30
2,141.00	0.50	160.00	2,139.95	7.79	-53.11	-4.78	94.00	148.60	0.21
2,235.00	0.70	148.50	2,233.95	6.91	-52.67	-3.93	94.00	153.29	0.25
2,329.00	1.00	134.80	2,327.94	5.84	-51.78	-2.91	94.00	140.44	0.38
2,424.00	1.50	119.80	2,422.91	4.64	-50.12	-1.81	95.00	125.79	0.62
2,519.00	2.30	115.60	2,517.86	3.20	-47.32	-0.53	95.00	117.26	0.85
2,614.00	2.70	110.70	2,612.77	1.58	-43.51	0.87	95.00	112.95	0.48
2,707.00	3.60	108.30	2,705.63	-0.11	-38.68	2.29	93.00	109.33	0.98
2,802.00	4.60	107.50	2,800.38	-2.19	-32.22	4.00	95.00	107.85	1.05
2,893.00	5.00	107.70	2,891.06	-4.49	-24.96	5.89	91.00	107.60	0.44
3,037.00	4.40	108.51	3,034.58	-8.15	-13.75	8.92	144.00	108.08	0.42
3,132.00	2.51	111.68	3,129.40	-10.08	-8.36	10.53	95.00	109.66	2.00
3,226.00	1.36	132.77	3,223.35	-11.60	-5.62	11.90	94.00	119.06	1.42
3,320.00	1.27	136.02	3,317.32	-13.10	-4.08	13.31	94.00	134.34	0.12
3,415.00	1.36	139.63	3,412.30	-14.72	-2.62	14.84	95.00	137.89	0.13
3,510.00	1.36	138.13	3,507.27	-16.42	-1.14	16.46	95.00	138.88	0.04
3,607.00	1.32	137.16	3,604.25	-18.09	0.39	18.04	97.00	137.65	0.05
3,702.00	1.36	139.10	3,699.22	-19.75	1.87	19.61	95.00	138.14	0.06
3,796.00	1.32	136.29	3,793.19	-21.38	3.35	21.15	94.00	137.72	0.08
3,892.00	1.63	169.95	3,889.16	-23.52	4.35	23.24	96.00	154.94	0.94
3,987.00	2.73	192.01	3,984.10	-27.06	4.12	26.79	95.00	183.79	1.44
4,083.00	2.73	193.77	4,079.99	-31.52	3.10	31.29	96.00	192.89	0.09
4,178.00	2.73	189.55	4,174.88	-35.95	2.18	35.77	95.00	191.66	0.21
4,272.00	2.64	189.55	4,268.78	-40.29	1.45	40.14	94.00	189.55	0.10
4,367.00	2.59	189.90	4,363.68	-44.56	0.72	44.45	95.00	189.72	0.06
4,461.00	2.64	187.80	4,457.58	-48.80	0.06	48.72	94.00	188.84	0.11
4,557.00	2.37	190.95	4,553.49	-52.94	-0.61	52.89	96.00	189.29	0.32



End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
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Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
4,652.00	2.42	187.17	4,648.40	-56.86	-1.24	56.84	95.00	189.04	0.17
4,745.00	2.37	186.56	4,741.32	-60.71	-1.70	60.71	93.00	186.87	0.06
4,841.00	2.33	185.07	4,837.24	-64.63	-2.10	64.65	96.00	185.82	0.08
4,936.00	2.29	181.99	4,932.16	-68.45	-2.34	68.47	95.00	183.54	0.14
5,030.00	2.37	182.96	5,026.09	-72.27	-2.50	72.30	94.00	182.48	0.09
5,125.00	2.42	180.49	5,121.00	-76.24	-2.62	76.26	95.00	181.71	0.12
5,219.00	2.46	172.32	5,214.92	-80.22	-2.37	80.23	94.00	176.37	0.37
5,314.00	2.64	177.33	5,309.83	-84.43	-2.00	84.40	95.00	174.91	0.30
5,408.00	2.77	176.45	5,403.72	-88.86	-1.75	88.81	94.00	176.88	0.15
5,503.00	2.90	176.36	5,498.60	-93.54	-1.46	93.48	95.00	176.40	0.14
5,598.00	2.90	197.37	5,593.49	-98.24	-2.02	98.19	95.00	186.87	1.11
5,694.00	3.03	199.92	5,689.36	-102.94	-3.61	102.98	96.00	198.67	0.19
5,789.00	2.81	201.24	5,784.23	-107.47	-5.31	107.60	95.00	200.56	0.24
5,884.00	2.99	200.01	5,879.11	-111.97	-7.00	112.19	95.00	200.61	0.20
5,979.00	2.59	171.79	5,974.00	-116.42	-7.55	116.66	95.00	186.93	1.49
6,074.00	2.55	173.11	6,068.91	-120.64	-6.99	120.85	95.00	172.44	0.08
6,169.00	2.37	171.18	6,163.82	-124.68	-6.43	124.85	95.00	172.18	0.21
6,264.00	2.29	176.98	6,258.74	-128.52	-6.03	128.66	95.00	174.03	0.26
6,360.00	2.29	175.92	6,354.66	-132.35	-5.79	132.46	96.00	176.45	0.04
6,455.00	2.51	199.22	6,449.58	-136.21	-6.34	136.35	95.00	188.11	1.04
6,550.00	2.42	194.82	6,544.50	-140.11	-7.54	140.31	95.00	197.06	0.22
6,644.00	2.59	193.06	6,638.41	-144.10	-8.53	144.35	94.00	193.91	0.20
6,739.00	2.42	196.84	6,733.32	-148.11	-9.59	148.41	95.00	194.89	0.25
6,834.00	2.24	185.50	6,828.24	-151.88	-10.35	152.22	95.00	191.39	0.52
6,930.00	2.24	166.52	6,924.17	-155.57	-10.09	155.89	96.00	176.01	0.77
7,026.00	1.93	145.78	7,020.10	-158.73	-8.75	158.97	96.00	156.93	0.84
7,120.00	1.41	137.78	7,114.06	-160.89	-7.08	161.04	94.00	142.40	0.60



End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Ross Draw 25-36 Fed West
Well: 161H
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well 161H
TVD Reference: RKB=23' @ 2951.00usft (Frontier 17)
MD Reference: RKB=23' @ 2951.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
7,215.00	0.92	143.32	7,209.04	-162.37	-5.84	162.44	95.00	139.97	0.53
7,309.00	0.88	205.37	7,303.03	-163.63	-5.70	163.69	94.00	173.58	0.99
7,405.00	0.57	177.42	7,399.03	-164.77	-5.99	164.85	96.00	194.44	0.48
7,500.00	0.79	165.55	7,494.02	-165.88	-5.81	165.94	95.00	170.52	0.27
7,595.00	0.53	43.91	7,589.02	-166.20	-5.34	166.23	95.00	124.16	1.22
7,690.00	1.45	72.65	7,684.00	-165.52	-3.89	165.48	95.00	65.07	1.07
7,785.00	1.71	83.02	7,778.97	-164.99	-1.33	164.80	95.00	78.26	0.41
7,879.00	0.92	148.15	7,872.94	-165.46	0.46	165.17	94.00	104.73	1.66
7,973.00	1.23	189.20	7,966.93	-167.10	0.69	166.79	94.00	171.76	0.86
8,068.00	1.49	197.19	8,061.90	-169.28	0.17	169.01	95.00	193.58	0.34
8,164.00	1.67	190.16	8,157.87	-171.85	-0.45	171.60	96.00	193.47	0.28
8,258.00	1.49	185.15	8,251.83	-174.42	-0.80	174.19	94.00	187.80	0.24
8,353.00	1.85	163.36	8,346.79	-177.12	-0.47	176.86	95.00	173.07	0.76
8,447.00	1.98	158.52	8,440.74	-180.08	0.56	179.76	94.00	160.86	0.22
8,542.00	2.20	173.11	8,535.68	-183.42	1.38	183.05	95.00	166.20	0.60
8,636.00	2.11	174.61	8,629.61	-186.93	1.75	186.54	94.00	173.84	0.11
8,730.00	2.20	208.62	8,723.55	-190.24	1.05	189.88	94.00	191.98	1.34
8,825.00	2.20	220.49	8,818.48	-193.23	-1.00	192.98	95.00	214.56	0.48
8,920.00	1.98	231.38	8,913.41	-195.64	-3.47	195.52	95.00	225.65	0.48
9,014.00	2.20	231.47	9,007.35	-197.78	-6.15	197.81	94.00	231.43	0.23
9,107.00	2.11	236.83	9,100.29	-199.83	-8.98	200.01	93.00	234.09	0.24
9,203.00	1.98	214.86	9,196.23	-202.15	-11.41	202.47	96.00	226.20	0.82
9,297.00	1.63	216.18	9,290.18	-204.56	-13.12	204.98	94.00	215.46	0.37
9,392.00	1.45	215.83	9,385.14	-206.63	-14.63	207.13	95.00	216.02	0.19
9,487.00	1.41	220.13	9,480.11	-208.50	-16.08	209.07	95.00	217.95	0.12
9,581.00	1.41	228.04	9,574.09	-210.16	-17.69	210.82	94.00	224.09	0.21
9,675.00	1.19	224.18	9,668.06	-211.63	-19.23	212.38	94.00	226.27	0.25



End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
9,771.00	1.19	222.33	9,764.04	-213.08	-20.59	213.90	96.00	223.26	0.04
9,865.00	1.23	218.55	9,858.02	-214.59	-21.88	215.48	94.00	220.41	0.09
9,960.00	1.27	208.53	9,953.00	-216.31	-23.02	217.27	95.00	213.46	0.23
10,053.00	1.27	195.35	10,045.98	-218.21	-23.78	219.21	93.00	201.94	0.31
10,148.00	1.32	198.95	10,140.95	-220.26	-24.42	221.29	95.00	197.18	0.10
10,243.00	1.19	186.30	10,235.93	-222.28	-24.88	223.33	95.00	192.95	0.32
10,327.00	0.92	191.83	10,319.91	-223.81	-25.12	224.87	84.00	188.71	0.34
10,483.00	1.93	204.40	10,475.86	-227.42	-26.46	228.55	156.00	200.35	0.67
10,576.00	6.15	182.08	10,568.62	-233.83	-27.29	235.00	93.00	187.36	4.76
10,623.00	8.09	173.55	10,615.25	-239.63	-27.01	240.78	47.00	177.24	4.69
10,670.00	9.23	181.55	10,661.72	-246.69	-26.74	247.80	47.00	177.81	3.52
10,717.00	11.56	187.35	10,707.94	-255.13	-27.44	256.27	47.00	184.77	5.43
10,764.00	11.91	181.11	10,753.96	-264.65	-28.14	265.81	47.00	184.18	2.80
10,811.00	13.54	171.79	10,799.81	-274.95	-27.45	276.06	47.00	176.16	5.57
10,859.00	15.43	165.20	10,846.29	-286.68	-25.01	287.64	48.00	168.28	5.22
10,890.00	15.60	164.67	10,876.16	-294.69	-22.86	295.51	31.00	164.93	0.71
10,922.00	18.37	162.65	10,906.76	-303.65	-20.21	304.31	32.00	163.58	8.85
10,953.00	25.45	160.98	10,935.50	-314.63	-16.58	315.06	31.00	161.69	22.92
10,985.00	32.88	162.92	10,963.43	-329.45	-11.78	329.59	32.00	162.06	23.40
11,016.00	38.46	170.12	10,988.61	-347.01	-7.65	346.89	31.00	166.76	22.50
11,047.00	41.32	173.64	11,012.40	-366.69	-4.86	366.38	31.00	171.93	11.75
11,078.00	43.87	176.28	11,035.22	-387.59	-3.03	387.14	31.00	174.99	10.04
11,110.00	48.26	180.06	11,057.42	-410.60	-2.33	410.08	32.00	178.24	16.14
11,141.00	50.20	185.86	11,077.67	-434.03	-3.55	433.54	31.00	183.00	15.49
11,173.00	52.26	188.49	11,097.71	-458.78	-6.68	458.42	32.00	187.19	9.08
11,204.00	52.88	189.02	11,116.56	-483.11	-10.42	482.93	31.00	188.76	2.42
11,235.00	57.32	189.28	11,134.29	-508.20	-14.47	508.21	31.00	189.15	14.34



End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Ross Draw 25-36 Fed West
Well: 161H
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well 161H
TVD Reference: RKB=23' @ 2951.00usft (Frontier 17)
MD Reference: RKB=23' @ 2951.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
11,266.00	62.33	188.14	11,149.86	-534.68	-18.52	534.88	31.00	188.70	16.47
11,297.00	65.05	187.97	11,163.60	-562.20	-22.41	562.57	31.00	188.05	8.79
11,328.00	67.56	187.70	11,176.06	-590.32	-26.28	590.86	31.00	187.83	8.14
11,359.00	70.20	187.97	11,187.23	-618.96	-30.22	619.68	31.00	187.84	8.55
11,390.00	74.11	188.40	11,196.73	-648.16	-34.42	649.07	31.00	188.19	12.68
11,423.00	77.23	185.94	11,204.90	-679.88	-38.41	680.96	33.00	187.16	11.90
11,453.00	81.27	186.56	11,210.49	-709.17	-41.62	710.39	30.00	186.25	13.62
11,486.00	84.04	185.77	11,214.71	-741.71	-45.13	743.07	33.00	186.16	8.72
11,518.00	88.35	185.24	11,216.83	-773.48	-48.19	774.97	32.00	185.50	13.57
11,548.00	90.55	182.78	11,217.12	-803.40	-50.29	804.96	30.00	184.01	11.00
11,613.00	89.67	181.67	11,216.99	-868.35	-52.82	869.95	65.00	182.22	2.18
11,707.00	90.77	180.85	11,216.63	-962.33	-54.88	963.89	94.00	181.26	1.46
11,801.00	90.77	179.70	11,215.37	-1,056.32	-55.33	1,057.76	94.00	180.28	1.22
11,895.00	89.49	179.70	11,215.16	-1,150.31	-54.84	1,151.58	94.00	179.70	1.36
11,926.00	89.46	179.64	11,215.44	-1,181.31	-54.66	1,182.51	31.00	179.67	0.20
12,005.00	87.25	181.37	11,217.71	-1,260.27	-55.36	1,261.38	79.00	180.51	3.55
12,085.00	87.56	185.59	11,221.33	-1,340.02	-60.21	1,341.28	80.00	183.48	5.28
12,179.00	87.96	184.80	11,225.00	-1,433.56	-68.72	1,435.16	94.00	185.19	0.94
12,273.00	91.60	181.90	11,225.36	-1,527.37	-74.21	1,529.13	94.00	183.35	4.95
12,366.00	91.69	181.29	11,222.69	-1,620.30	-76.79	1,622.05	93.00	181.60	0.66
12,460.00	91.21	178.74	11,220.32	-1,714.26	-76.82	1,715.87	94.00	180.01	2.76
12,554.00	92.57	178.65	11,217.22	-1,808.18	-74.68	1,809.52	94.00	178.70	1.45
12,648.00	92.84	180.58	11,212.78	-1,902.07	-74.05	1,903.22	94.00	179.61	2.07
12,741.00	94.15	181.55	11,207.11	-1,994.88	-75.77	1,995.98	93.00	181.06	1.75
12,835.00	93.63	182.78	11,200.73	-2,088.59	-79.32	2,089.74	94.00	182.17	1.42
12,929.00	93.19	182.34	11,195.14	-2,182.33	-83.51	2,183.57	94.00	182.56	0.66
13,024.00	93.36	181.90	11,189.71	-2,277.11	-87.02	2,278.40	95.00	182.12	0.50



End Of Well Report



Company: XTO Energy
Project: Eddy County, NM (Nad-27 / East Zone)
Site: Ross Draw 25-36 Fed West
Well: 161H
Wellbore: ST01
Design: ST01

Local Co-ordinate Reference: Well 161H
TVD Reference: RKB=23' @ 2951.00usft (Frontier 17)
MD Reference: RKB=23' @ 2951.00usft (Frontier 17)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WBDS_SQL_2

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
13,118.00	92.97	184.36	11,184.52	-2,370.82	-92.14	2,372.25	94.00	183.13	2.65
13,212.00	89.54	179.26	11,182.46	-2,464.71	-95.10	2,466.15	94.00	181.81	6.54
13,306.00	93.41	181.11	11,180.04	-2,558.66	-95.41	2,559.96	94.00	180.18	4.56
13,400.00	90.07	178.56	11,177.19	-2,652.59	-95.13	2,653.73	94.00	179.83	4.47
13,494.00	91.82	182.60	11,175.64	-2,746.55	-96.08	2,747.60	94.00	180.58	4.68
13,588.00	91.30	183.83	11,173.08	-2,840.36	-101.35	2,841.56	94.00	183.22	1.42
13,682.00	91.74	184.10	11,170.59	-2,934.11	-107.85	2,935.52	94.00	183.96	0.55
13,775.00	92.57	183.75	11,167.09	-3,026.82	-114.21	3,028.45	93.00	183.93	0.97
13,869.00	93.54	185.95	11,162.08	-3,120.35	-122.15	3,122.27	94.00	184.85	2.55
13,963.00	91.78	184.89	11,157.72	-3,213.82	-131.02	3,216.09	94.00	185.42	2.19
14,057.00	93.10	185.15	11,153.71	-3,307.37	-139.23	3,309.96	94.00	185.02	1.43
14,151.00	90.64	183.31	11,150.65	-3,401.05	-146.16	3,403.88	94.00	184.23	3.27
14,244.00	94.20	185.42	11,146.72	-3,493.68	-153.23	3,496.76	93.00	184.36	4.45
14,338.00	94.81	188.32	11,139.34	-3,586.71	-164.44	3,590.27	94.00	186.87	3.14
14,432.00	95.12	190.95	11,131.20	-3,679.03	-180.11	3,683.33	94.00	189.63	2.81
14,453.00	94.99	191.13	11,129.35	-3,699.56	-184.11	3,704.05	21.00	191.04	1.05
14,547.00	92.04	190.43	11,123.59	-3,791.71	-201.66	3,797.05	94.00	190.78	3.23
14,641.00	90.07	188.49	11,121.86	-3,884.41	-217.10	3,890.47	94.00	189.46	2.94
14,735.00	89.19	188.58	11,122.46	-3,977.37	-231.06	3,984.07	94.00	188.53	0.94
14,829.00	87.34	186.65	11,125.31	-4,070.49	-243.51	4,077.74	94.00	187.62	2.84
14,923.00	88.44	184.89	11,128.77	-4,163.94	-252.95	4,171.58	94.00	185.77	2.21
15,017.00	90.95	182.16	11,129.27	-4,257.75	-258.73	4,265.56	94.00	183.52	3.95
15,110.00	90.99	181.73	11,127.70	-4,350.68	-261.88	4,358.52	93.00	181.95	0.46
15,205.00	90.95	182.60	11,126.09	-4,445.60	-265.47	4,453.49	95.00	182.17	0.92
15,299.00	90.55	182.25	11,124.86	-4,539.51	-269.45	4,547.48	94.00	182.42	0.57
15,393.00	90.37	182.60	11,124.10	-4,633.42	-273.42	4,641.46	94.00	182.43	0.42
15,487.00	90.33	182.69	11,123.53	-4,727.32	-277.76	4,735.46	94.00	182.65	0.10



End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
Project:	Eddy County, NM (Nad-27 / East Zone)	TVD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	CL (usft)	CL Azi (°)	DLeg (°/100ft)
15,582.00	89.58	182.52	11,123.60	-4,822.22	-282.08	4,830.45	95.00	182.61	0.81
15,676.00	88.97	182.96	11,124.79	-4,916.10	-286.57	4,924.44	94.00	182.74	0.80
15,770.00	89.14	180.23	11,126.34	-5,010.04	-289.19	5,018.38	94.00	181.59	2.91
15,864.00	90.90	178.39	11,126.31	-5,104.03	-288.06	5,112.15	94.00	179.31	2.71
15,958.00	91.43	179.44	11,124.40	-5,197.99	-286.28	5,205.86	94.00	178.91	1.25
16,052.00	87.52	180.58	11,125.26	-5,291.97	-286.29	5,299.69	94.00	180.01	4.33
16,146.00	89.19	181.90	11,127.96	-5,385.90	-288.33	5,393.59	94.00	181.24	2.26
16,240.00	91.08	181.99	11,127.74	-5,479.84	-291.52	5,487.56	94.00	181.94	2.01
16,335.00	92.22	183.66	11,125.00	-5,574.68	-296.20	5,582.51	95.00	182.82	2.13
16,429.00	89.67	182.16	11,123.45	-5,668.54	-300.97	5,676.49	94.00	182.91	3.15
16,523.00	92.13	181.99	11,121.97	-5,762.46	-304.37	5,770.45	94.00	182.08	2.62
16,617.00	94.42	181.37	11,116.60	-5,856.26	-307.12	5,864.26	94.00	181.68	2.52
16,711.00	95.03	184.45	11,108.86	-5,949.80	-311.88	5,957.92	94.00	182.91	3.33
16,805.00	92.57	186.30	11,102.63	-6,043.17	-320.66	6,051.64	94.00	185.38	3.27
16,899.00	89.19	185.07	11,101.19	-6,136.69	-329.97	6,145.53	94.00	185.68	3.83
16,993.00	89.85	184.89	11,101.97	-6,230.33	-338.13	6,239.48	94.00	184.98	0.73
17,087.00	89.67	185.15	11,102.37	-6,323.97	-346.36	6,333.43	94.00	185.02	0.34
17,158.00	88.84	184.19	11,103.29	-6,394.72	-352.14	6,404.40	71.00	184.67	1.79
17,252.00	88.66	184.27	11,105.34	-6,488.44	-359.07	6,498.37	94.00	184.23	0.21
17,347.00	88.62	184.54	11,107.60	-6,583.14	-366.36	6,593.32	95.00	184.40	0.29
17,441.00	88.09	184.80	11,110.29	-6,676.79	-374.01	6,687.25	94.00	184.67	0.63
17,495.00	88.22	184.71	11,112.03	-6,730.57	-378.49	6,741.20	54.00	184.75	0.29
17,560.00	88.22	184.71	11,114.05	-6,795.32	-383.82	6,806.15	65.00	184.71	0.00

TD: Latitude = 32.000487 / Longitude = -103.945533 - TD: Y= 364120.08 / X= 620215.88 - Final Station Closure Distance= 6806.15 / Direction= 183.23 - Projection to Bit: 17560.00' MI



End Of Well Report



Company:	XTO Energy	Local Co-ordinate Reference:	Well 161H
Project:	Eddy County, NM-(Nad-27 / East Zone)	TVD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Site:	Ross Draw 25-36 Fed West	MD Reference:	RKB=23' @ 2951.00usft (Frontier 17)
Well:	161H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	ST01	Database:	WBDS_SQL_2

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
17,560.00	11,114.05	-6,795.32	-383.82	TD: Latitude = 32.000487 / Longitude = -103.945533
17,560.00	11,114.05	-6,795.32	-383.82	TD: Y= 364120.08 / X= 620215.88
17,560.00	11,114.05	-6,795.32	-383.82	Final Station Closure Distance= 6806.15 /Direction= 183.23
17,560.00	11,114.05	-6,795.32	-383.82	Projection to Bit: 17560.00' MD/ 11114.05' TVD

Checked By: _____	Approved By: _____	Date: _____
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