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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT AS-DRILLED PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 45772	98220	PURPLE SAGE; WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
98220	LONE WATIE 32 STATE	168H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO ENERGY, INC.	2,980'

[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
A	32	25 S	29 E		336	NORTH	695	EAST	EDDY

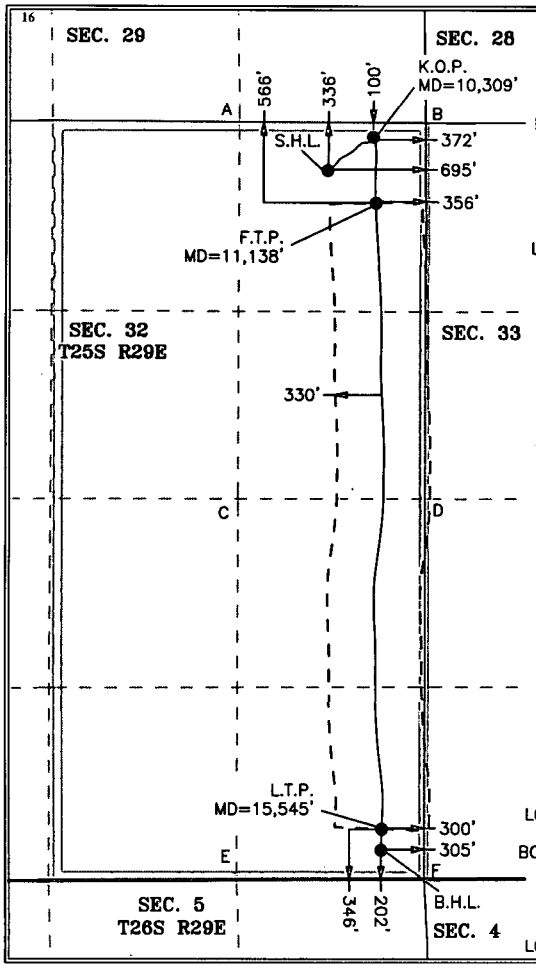
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	32	25 S	29 E		202	SOUTH	305	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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



SURFACE LOCATION NAD 83 NME	SURFACE LOCATION NAD 27 NME
Y= 397,594.6	Y= 397,536.5
X= 644,529.7	X= 603,345.0
LAT.= 32.092629°N	LAT.= 32.092504°N
LONG.= 104.000108°W	LONG.= 103.999622°W

K.O.P. NAD 83 NME	K.O.P. NAD 27 NME
Y= 397,829.5	Y= 397,771.4
X= 644,853.6	X= 603,668.9
LAT.= 32.093272°N	LAT.= 32.093147°N
LONG.= 103.999059°W	LONG.= 103.998574°W

FIRST TAKE POINT NAD 83 NME	FIRST TAKE POINT NAD 27 NME
Y= 397,362.8	Y= 397,304.7
X= 644,869.3	X= 603,684.6
LAT.= 32.091989°N	LAT.= 32.091864°N
LONG.= 103.999014°W	LONG.= 103.998528°W

CORNER COORDINATES TABLE NAD 83 NME

A	Y= 397,933.6 N,	X= 643,902.8 E
B	Y= 397,927.3 N,	X= 645,225.4 E
C	Y= 395,276.7 N,	X= 643,895.4 E
D	Y= 395,276.1 N,	X= 645,222.7 E
E	Y= 392,616.1 N,	X= 643,888.3 E
F	Y= 392,621.5 N,	X= 645,220.8 E

CORNER COORDINATES TABLE NAD 27 NME

A	Y= 397,875.5 N,	X= 602,718.1 E
B	Y= 397,869.2 N,	X= 604,040.7 E
C	Y= 395,218.7 N,	X= 602,710.6 E
D	Y= 395,218.1 N,	X= 604,037.9 E
E	Y= 392,558.1 N,	X= 602,703.5 E
F	Y= 392,563.5 N,	X= 604,035.9 E

LAST TAKE POINT NAD 83 NME	LAST TAKE POINT NAD 27 NME
Y= 392,966.4	Y= 392,908.4
X= 644,920.8	X= 603,736.0
LAT.= 32.079903°N	LAT.= 32.079778°N
LONG.= 103.998891°W	LONG.= 103.998406°W

BOTTOM HOLE LOCATION NAD 83 NME	BOTTOM HOLE LOCATION NAD 27 NME
Y= 392,822.5	Y= 392,764.5
X= 644,915.8	X= 603,731.0
LAT.= 32.079507°N	LAT.= 32.079383°N
LONG.= 103.998909°W	LONG.= 103.998424°W

[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.

Cheryl Rowell 1/14/20
Signature Date

Cheryl Rowell
Printed Name

cheryl_rowell@xtoenergy.com
E-mail Address

[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.

1-14-2020
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number RR/JC 2019010140

P:\PROJECTS\2019\2019010140-XTO-LONE_WATIE_32_STATE_168H-EDDY\DWG\2019010140-XTO-LONE_WATIE_32_STATE_168H_AS-DRILLED.dwg

RECEIVED
JAN 16 2020
EMNRD-OCD ARTESIA

Intent [ ] As Drilled [X]

API #
30-015-45772

Operator Name:	Property Name:	Well Number
XTO ENERGY INC.	LONE WATIE 32 STATE	168H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	32	25S	29E		100	N	372	E	Eddy

Latitude	Longitude	NAD
32.093272	103.999059	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
A	32	25S	29E		566	N	356	E	Eddy

Latitude	Longitude	NAD
32.091989	103.999014	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
P	32	25S	29E		346	S	300	E	Eddy

Latitude	Longitude	NAD
32.079903	103.998891	83

< 330
> 280 OK,

Is this well the defining well for the Horizontal Spacing Unit? [Yes]

Is this well an infill well? [ ]

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

WELLBENDERS
DIRECTIONAL SERVICES LLC

State of New Mexico
County of Eddy

I, Jeremy Esqueda, certify that: I am employed by WellBenders Directional Services LLC; that I did on the day(s) of May 17, 2019 through May 24, 2019 conduct or supervise the taking of MWD Directional Survey from a depth of 205 feet to a depth of 10,155 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 XTO Energy Inc. for the State of New Mexico; Well: Lone Waite 32 State 168H in Eddy County; 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
(Sign Name)

Jeremy Esqueda
MWD Manager
Digitally Signed by Jeremy Esqueda

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-190725	6/18/2019

Lease	Well Name	County & State
SEC 32, T25S, R29E	Lone Watie 32 State #168H	Eddy County, NM

API No.	Survey Depth Range	Survey Type
30-015-45772	10155 feet to 15689 feet MD	MWD

Sidetrack Information	Directional Supervisor/Surveyor
Click here to enter text.	Jeff Newton

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

Digitally signed by Christopher Hughes
DN: cn=Christopher Hughes, o=QES, ou, email=chrish@qeslp.com, c=US
Date: 2019.07.17 09:05:21 -05'00'

Christopher Hughes
MWD Compliance Manager
Quintana Energy Services

XTO ENERGY

Survey Report

QES QUINTANA ENERGY SERVICES

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec 32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Project Eddy County, NM

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 Sec 32, T25S, R29E

Site Position:		**Northing:**	397,536.50 usft	**Latitude:**	32° 5' 33.015 N
From:	Map	**Easting:**	603,345.00 usft	**Longitude:**	103° 59' 58.639 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.18 °

Well Lone Watie 32 State #168H

Well Position	**+N/-S**	0.0 usft	**Northing:**	397,536.50 usft	**Latitude:**	32° 5' 33.015 N
	+E/-W	0.0 usft	**Easting:**	603,345.00 usft	**Longitude:**	103° 59' 58.639 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,980.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	5/9/2019	6.95	59.77	47,815.00000000

Design Wellbore #1

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	175.67

Survey Program **Date** 6/12/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
205.0	10,155.0	Survey #1 (Wellbore #1)	MWD	OWSG MWD - Standard
10,236.0	15,689.0	QES MWD Surveys (Wellbore #1)	MWD	OWSG MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
205.0	1.30	239.00	205.0	-1.2	-2.0	1.0	0.63	0.63	0.00
300.0	2.80	242.00	299.9	-2.8	-5.0	2.5	1.58	1.58	3.16
422.0	2.88	242.00	421.8	-5.7	-10.3	4.9	0.07	0.07	0.00
483.0	4.60	229.00	482.6	-8.0	-13.5	7.0	3.13	2.82	-21.31
603.0	4.70	231.23	602.2	-14.2	-21.0	12.6	0.17	0.08	1.86
698.0	4.20	228.90	697.0	-19.0	-26.6	16.9	0.56	-0.53	-2.45
762.0	2.11	231.50	760.9	-21.2	-29.3	19.0	3.27	-3.27	4.06
856.0	1.71	210.75	854.8	-23.5	-31.4	21.1	0.84	-0.43	-22.07
951.0	1.19	137.98	949.8	-25.5	-31.4	23.0	1.86	-0.55	-76.60

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec 32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,046.0	2.42	97.99	1,044.7	-26.5	-28.8	24.2	1.78	1.29	-42.09
1,140.0	3.30	70.66	1,138.6	-25.9	-24.3	24.0	1.70	0.94	-29.07
1,235.0	2.90	36.73	1,233.5	-23.0	-20.3	21.4	1.95	-0.42	-35.72
1,331.0	2.90	37.70	1,329.4	-19.2	-17.3	17.8	0.05	0.00	1.01
1,426.0	2.99	18.98	1,424.2	-14.9	-15.1	13.7	1.01	0.09	-19.71
1,520.0	3.21	11.15	1,518.1	-10.0	-13.7	9.0	0.51	0.23	-8.33
1,614.0	3.30	39.50	1,612.0	-5.3	-11.5	4.5	1.70	0.10	30.16
1,708.0	1.80	62.00	1,705.9	-2.6	-8.5	1.9	1.89	-1.60	23.94
1,803.0	1.70	61.20	1,800.8	-1.2	-5.9	0.7	0.11	-0.11	-0.84
1,898.0	2.30	54.10	1,895.8	0.6	-3.2	-0.8	0.68	0.63	-7.47
1,992.0	2.20	58.80	1,989.7	2.6	-0.1	-2.6	0.22	-0.11	5.00
2,086.0	2.40	54.10	2,083.6	4.7	3.0	-4.5	0.29	0.21	-5.00
330' HL Crossed @ 2137.3'MD / 2134.9' TVD									
2,137.3	2.40	54.10	2,134.9	6.0	4.8	-5.6	0.00	0.00	0.00
2,181.0	2.40	53.90	2,178.5	7.1	6.3	-6.6	0.02	0.00	-0.46
2,275.0	2.60	57.70	2,272.4	9.4	9.7	-8.6	0.28	0.21	4.04
2,370.0	2.50	66.80	2,367.4	11.3	13.4	-10.3	0.44	-0.11	9.58
2,465.0	2.50	70.70	2,462.3	12.8	17.2	-11.5	0.18	0.00	4.11
2,560.0	1.90	79.60	2,557.2	13.8	20.7	-12.2	0.72	-0.63	9.37
2,653.0	1.90	71.30	2,650.1	14.6	23.7	-12.8	0.30	0.00	-8.92
2,747.0	3.20	54.20	2,744.0	16.6	27.3	-14.5	1.59	1.38	-18.19
2,839.0	3.00	51.50	2,835.9	19.6	31.3	-17.2	0.27	-0.22	-2.93
2,934.0	2.90	48.80	2,930.8	22.8	35.1	-20.0	0.18	-0.11	-2.84
3,029.0	2.80	46.80	3,025.7	25.9	38.6	-22.9	0.15	-0.11	-2.11
3,124.0	2.80	45.20	3,120.6	29.1	41.9	-25.9	0.08	0.00	-1.68
3,219.0	2.60	44.00	3,215.4	32.3	45.0	-28.8	0.22	-0.21	-1.26
3,315.0	2.50	43.10	3,311.4	35.4	48.0	-31.7	0.11	-0.10	-0.94
3,406.0	2.40	44.30	3,402.3	38.2	50.7	-34.3	0.12	-0.11	1.32
3,502.0	3.70	41.40	3,498.1	42.0	54.1	-37.8	1.36	1.35	-3.02
3,525.0	2.20	49.60	3,521.1	42.8	54.9	-38.6	6.76	-6.52	35.65
3,596.0	4.00	39.50	3,592.0	45.6	57.6	-41.2	2.64	2.54	-14.23
3,691.0	3.90	38.80	3,686.8	50.7	61.7	-45.9	0.12	-0.11	-0.74
3,785.0	3.70	39.90	3,780.6	55.5	65.6	-50.4	0.23	-0.21	1.17
3,880.0	3.50	39.20	3,875.4	60.1	69.4	-54.7	0.22	-0.21	-0.74
3,975.0	3.40	36.60	3,970.2	64.6	72.9	-58.9	0.20	-0.11	-2.74
4,070.0	3.60	30.00	4,065.0	69.5	76.1	-63.5	0.47	0.21	-6.95
4,164.0	3.90	26.50	4,158.8	74.9	79.0	-68.7	0.40	0.32	-3.72
4,258.0	3.60	47.50	4,252.6	79.8	82.6	-73.3	1.49	-0.32	22.34
4,353.0	4.40	61.70	4,347.4	83.5	88.0	-76.6	1.33	0.84	14.95
4,447.0	4.40	61.60	4,441.1	86.9	94.4	-79.5	0.01	0.00	-0.11
4,542.0	4.40	61.20	4,535.8	90.4	100.8	-82.5	0.03	0.00	-0.42
4,637.0	4.20	61.80	4,630.6	93.8	107.0	-85.5	0.22	-0.21	0.63
4,732.0	4.10	62.00	4,725.3	97.0	113.1	-88.2	0.11	-0.11	0.21

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec 32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,826.0	4.20	59.90	4,819.1	100.4	119.0	-91.1	0.19	0.11	-2.23
4,920.0	4.10	61.30	4,912.8	103.7	125.0	-94.0	0.15	-0.11	1.49
5,015.0	4.00	60.40	5,007.6	107.0	130.8	-96.8	0.12	-0.11	-0.95
5,109.0	4.00	57.80	5,101.4	110.3	136.5	-99.7	0.19	0.00	-2.77
5,202.0	3.70	57.80	5,194.2	113.7	141.7	-102.6	0.32	-0.32	0.00
5,296.0	3.50	57.70	5,288.0	116.8	146.7	-105.4	0.21	-0.21	-0.11
5,391.0	3.30	60.60	5,382.8	119.7	151.6	-107.9	0.28	-0.21	3.05
5,486.0	2.90	62.70	5,477.7	122.1	156.1	-110.0	0.44	-0.42	2.21
5,581.0	2.60	60.00	5,572.6	124.3	160.1	-111.9	0.34	-0.32	-2.84
5,675.0	2.60	60.90	5,666.5	126.4	163.8	-113.7	0.04	0.00	0.96
5,770.0	2.40	63.20	5,761.4	128.4	167.5	-115.4	0.24	-0.21	2.42
5,863.0	2.90	48.10	5,854.3	130.8	170.9	-117.5	0.92	0.54	-16.24
5,957.0	3.00	50.00	5,948.1	134.0	174.6	-120.4	0.15	0.11	2.02
6,052.0	2.80	53.40	6,043.0	137.0	178.4	-123.1	0.28	-0.21	3.58
6,146.0	2.60	56.40	6,136.9	139.5	182.0	-125.4	0.26	-0.21	3.19
6,240.0	2.70	51.60	6,230.8	142.1	185.5	-127.7	0.26	0.11	-5.11
6,336.0	2.80	50.50	6,326.7	145.0	189.1	-130.3	0.12	0.10	-1.15
6,430.0	2.70	50.20	6,420.6	147.8	192.5	-132.9	0.11	-0.11	-0.32
6,526.0	2.20	49.60	6,516.5	150.5	195.7	-135.3	0.52	-0.52	-0.63
6,621.0	2.00	48.20	6,611.4	152.8	198.3	-137.4	0.22	-0.21	-1.47
6,716.0	1.60	49.50	6,706.4	154.7	200.6	-139.2	0.42	-0.42	1.37
6,810.0	1.40	28.30	6,800.4	156.6	202.1	-140.9	0.62	-0.21	-22.55
6,904.0	2.90	23.50	6,894.3	159.8	203.6	-144.0	1.61	1.60	-5.11
6,998.0	2.00	45.40	6,988.2	163.1	205.7	-147.1	1.37	-0.96	23.30
7,092.0	2.30	41.60	7,082.1	165.7	208.1	-149.5	0.35	0.32	-4.04
7,187.0	2.50	47.50	7,177.1	168.5	210.9	-152.1	0.33	0.21	6.21
7,280.0	2.40	54.90	7,270.0	171.0	214.0	-154.4	0.36	-0.11	7.96
7,374.0	3.20	43.20	7,363.9	174.0	217.4	-157.1	1.04	0.85	-12.45
7,467.0	2.30	54.80	7,456.8	177.0	220.7	-159.8	1.13	-0.97	12.47
7,561.0	2.30	77.10	7,550.7	178.5	224.1	-161.1	0.95	0.00	23.72
7,655.0	2.30	56.70	7,644.6	180.0	227.5	-162.3	0.87	0.00	-21.70
7,748.0	3.30	49.40	7,737.5	182.7	231.1	-164.8	1.14	1.08	-7.85
7,842.0	2.50	43.80	7,831.4	186.0	234.6	-167.7	0.90	-0.85	-5.96
7,937.0	1.50	33.10	7,926.3	188.5	236.7	-170.1	1.12	-1.05	-11.26
8,032.0	2.30	28.50	8,021.3	191.2	238.3	-172.7	0.86	0.84	-4.84
8,126.0	2.90	68.90	8,115.2	193.8	241.4	-175.0	2.00	0.64	42.98
8,221.0	2.10	100.30	8,210.1	194.3	245.4	-175.2	1.64	-0.84	33.05
8,314.0	2.80	80.80	8,303.0	194.4	249.3	-175.0	1.16	0.75	-20.97
8,408.0	2.30	73.30	8,396.9	195.3	253.3	-175.6	0.64	-0.53	-7.98
8,502.0	1.70	76.70	8,490.9	196.1	256.5	-176.2	0.65	-0.64	3.62
8,596.0	1.70	72.20	8,584.8	196.9	259.2	-176.8	0.14	0.00	-4.79
8,690.0	2.00	86.40	8,678.8	197.4	262.2	-177.1	0.58	0.32	15.11
8,784.0	3.40	92.90	8,772.7	197.4	266.6	-176.7	1.52	1.49	6.91

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec 32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,878.0	2.90	106.40	8,866.5	196.6	271.6	-175.5	0.95	-0.53	14.36
8,973.0	2.80	87.40	8,961.4	196.0	276.3	-174.6	1.00	-0.11	-20.00
9,067.0	3.90	79.90	9,055.2	196.7	281.7	-174.8	1.26	1.17	-7.98
9,162.0	2.50	69.90	9,150.1	197.9	286.8	-175.7	1.58	-1.47	-10.53
9,256.0	1.80	74.10	9,244.0	199.0	290.2	-176.6	0.76	-0.74	4.47
9,349.0	1.30	73.40	9,337.0	199.7	292.6	-177.1	0.54	-0.54	-0.75
9,444.0	1.60	66.70	9,432.0	200.6	294.8	-177.7	0.36	0.32	-7.05
9,539.0	2.10	47.10	9,526.9	202.3	297.3	-179.3	0.84	0.53	-20.63
9,634.0	2.60	49.70	9,621.8	204.9	300.3	-181.6	0.54	0.53	2.74
9,729.0	3.40	37.70	9,716.7	208.5	303.6	-185.0	1.07	0.84	-12.63
9,824.0	3.80	42.60	9,811.5	213.0	307.5	-189.2	0.53	0.42	5.16
9,919.0	3.60	43.60	9,906.3	217.5	311.7	-193.4	0.22	-0.21	1.05
10,014.0	3.30	41.30	10,001.1	221.7	315.5	-197.3	0.35	-0.32	-2.42
10,109.0	3.50	30.90	10,096.0	226.3	318.8	-201.6	0.68	0.21	-10.95
MWD Tie-in @ 10155.0' MD / 10141.9' TVD									
10,155.0	3.20	33.30	10,141.9	228.5	320.2	-203.7	0.72	-0.65	5.22
10,236.0	2.71	28.23	10,222.8	232.1	322.4	-207.1	0.69	-0.60	-6.26
10,301.0	2.50	27.04	10,287.7	234.7	323.8	-209.6	0.33	-0.32	-1.83
10,332.0	1.31	105.21	10,318.7	235.2	324.4	-210.1	8.30	-3.84	252.16
10,364.0	4.68	148.94	10,350.7	234.0	325.4	-208.8	12.00	10.53	136.66
10,396.0	8.90	152.14	10,382.4	230.7	327.3	-205.4	13.24	13.19	10.00
10,428.0	11.67	159.10	10,413.9	225.5	329.6	-200.0	9.47	8.66	21.75
10,459.0	14.31	163.99	10,444.1	218.9	331.8	-193.2	9.22	8.52	15.77
10,490.0	15.92	167.32	10,474.0	211.1	333.7	-185.3	5.90	5.19	10.74
10,522.0	17.38	167.29	10,504.7	202.1	335.8	-176.2	4.56	4.56	-0.09
10,553.0	18.22	170.89	10,534.2	192.8	337.5	-166.8	4.46	2.71	11.61
10,633.0	21.18	172.40	10,609.5	166.1	341.4	-139.9	3.75	3.70	1.89
10,665.0	25.60	174.17	10,638.9	153.5	342.9	-127.2	13.98	13.81	5.53
10,696.0	31.52	178.62	10,666.1	138.8	343.8	-112.4	20.28	19.10	14.35
10,728.0	38.98	182.08	10,692.2	120.3	343.6	-94.0	24.13	23.31	10.81
10,759.0	43.85	181.70	10,715.5	99.8	342.9	-73.6	15.73	15.71	-1.23
10,793.0	47.01	180.95	10,739.3	75.6	342.4	-49.5	9.43	9.29	-2.21
10,825.0	49.86	180.29	10,760.6	51.7	342.1	-25.7	9.04	8.91	-2.06
10,856.0	53.19	181.40	10,779.8	27.4	341.8	-1.5	11.10	10.74	3.58
330' HL Crossed @ 10884.1'MD / 10795.9' TVD									
10,884.1	56.97	182.54	10,795.9	4.4	341.0	21.4	13.87	13.47	4.06
10,888.0	57.50	182.69	10,798.0	1.1	340.8	24.6	13.87	13.49	3.85
10,919.0	61.75	183.47	10,813.7	-25.6	339.4	51.1	13.88	13.71	2.52
10,950.0	63.55	181.86	10,828.0	-53.1	338.1	78.5	7.42	5.81	-5.19
10,981.0	65.59	181.27	10,841.3	-81.1	337.3	106.3	6.80	6.58	-1.90
11,013.0	68.54	178.77	10,853.7	-110.5	337.3	135.7	11.69	9.22	-7.81
11,044.0	71.81	178.99	10,864.2	-139.7	337.9	164.8	10.57	10.55	0.71
11,076.0	77.59	179.71	10,872.7	-170.6	338.3	195.6	18.19	18.06	2.25
11,107.0	81.21	178.36	10,878.4	-201.0	338.8	226.0	12.44	11.68	-4.35

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec.32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,138.0	83.89	178.64	10,882.4	-231.7	339.6	256.7	8.69	8.65	0.90
11,169.0	86.70	179.19	10,884.9	-262.6	340.2	287.6	9.24	9.06	1.77
11,201.0	86.39	178.29	10,886.9	-294.6	340.9	319.5	2.97	-0.97	-2.81
11,232.0	88.10	178.32	10,888.4	-325.5	341.8	350.4	5.52	5.52	0.10
11,263.0	90.53	179.68	10,888.7	-356.5	342.3	381.3	8.98	7.84	4.39
11,295.0	92.47	179.32	10,887.9	-388.5	342.6	413.2	6.17	6.06	-1.13
11,326.0	88.77	177.08	10,887.6	-419.5	343.6	444.2	13.95	-11.94	-7.23
11,420.0	89.44	175.89	10,889.0	-513.3	349.3	538.2	1.45	0.71	-1.27
11,514.0	90.09	175.27	10,889.4	-607.0	356.6	632.2	0.96	0.69	-0.66
11,607.0	90.67	174.85	10,888.8	-699.6	364.6	725.2	0.77	0.62	-0.45
11,702.0	88.63	175.53	10,889.4	-794.3	372.6	820.2	2.26	-2.15	0.72
11,796.0	91.40	178.37	10,889.4	-888.1	377.6	914.1	4.22	2.95	3.02
11,890.0	92.16	178.54	10,886.4	-982.1	380.1	1,008.0	0.83	0.81	0.18
11,985.0	88.43	179.03	10,885.9	-1,077.0	382.1	1,102.8	3.96	-3.93	0.52
12,079.0	88.57	179.30	10,888.4	-1,171.0	383.5	1,196.6	0.32	0.15	0.29
12,174.0	90.76	183.94	10,889.0	-1,265.9	380.8	1,291.0	5.40	2.31	4.88
12,269.0	89.72	180.45	10,888.6	-1,360.8	377.1	1,385.4	3.83	-1.09	-3.67
12,387.0	86.10	176.03	10,892.9	-1,478.6	380.8	1,503.2	4.84	-3.07	-3.75
12,480.0	91.79	179.32	10,894.6	-1,571.5	384.5	1,596.0	7.07	6.12	3.54
12,574.0	91.15	176.10	10,892.2	-1,665.4	388.3	1,689.9	3.49	-0.68	-3.43
12,668.0	89.11	176.54	10,892.0	-1,759.2	394.3	1,783.9	2.22	-2.17	0.47
12,763.0	88.93	179.87	10,893.6	-1,854.1	397.3	1,878.8	3.51	-0.19	3.51
12,856.0	88.85	177.60	10,895.4	-1,947.1	399.3	1,971.7	2.44	-0.09	-2.44
12,950.0	92.44	180.31	10,894.3	-2,041.0	401.1	2,065.5	4.78	3.82	2.88
13,044.0	91.18	182.00	10,891.4	-2,134.9	399.2	2,159.0	2.24	-1.34	1.80
13,138.0	89.94	180.09	10,890.4	-2,228.9	397.5	2,252.6	2.42	-1.32	-2.03
13,232.0	91.01	180.44	10,889.7	-2,322.9	397.0	2,346.3	1.20	1.14	0.37
13,325.0	89.86	185.07	10,889.0	-2,415.8	392.5	2,438.5	5.13	-1.24	4.98
13,420.0	90.53	186.19	10,888.6	-2,510.3	383.2	2,532.1	1.37	0.71	1.18
13,504.0	89.44	187.69	10,888.7	-2,593.7	373.1	2,614.5	2.21	-1.30	1.79
13,607.0	90.39	187.76	10,888.8	-2,695.8	359.2	2,715.2	0.92	0.92	0.07
13,701.0	90.70	188.54	10,887.9	-2,788.8	345.9	2,807.0	0.89	0.33	0.83
13,796.0	88.77	185.76	10,888.4	-2,883.1	334.1	2,900.0	3.56	-2.03	-2.93
13,890.0	87.90	181.00	10,891.1	-2,976.8	328.5	2,993.1	5.15	-0.93	-5.06
13,984.0	90.84	179.24	10,892.1	-3,070.8	328.4	3,086.8	3.65	3.13	-1.87
14,079.0	93.84	177.59	10,888.2	-3,165.7	331.0	3,181.6	3.60	3.16	-1.74
14,173.0	90.09	176.39	10,885.0	-3,259.5	335.9	3,275.5	4.19	-3.99	-1.28
14,268.0	88.66	177.78	10,886.1	-3,354.3	340.7	3,370.5	2.10	-1.51	1.46
14,361.0	92.69	181.17	10,885.0	-3,447.3	341.6	3,463.2	5.66	4.33	3.65
14,455.0	91.49	180.86	10,881.5	-3,541.2	339.9	3,556.8	1.32	-1.28	-0.33
14,549.0	89.89	178.73	10,880.4	-3,635.2	340.3	3,650.5	2.83	-1.70	-2.27
14,643.0	89.69	177.51	10,880.7	-3,729.1	343.3	3,744.4	1.32	-0.21	-1.30
14,738.0	89.72	177.86	10,881.2	-3,824.1	347.2	3,839.4	0.37	0.03	0.37

Company:	XTO ENERGY, INC.	**Local Co-ordinate Reference:**	Well Lone Watie 32 State #168H
Project:	Eddy County, NM	**TVD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Site:	Sec 32, T25S, R29E	**MD Reference:**	KB=23' @ 3003.0usft (Nabors M7507)
Well:	Lone Watie 32 State #168H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,832.0	90.39	176.88	10,881.1	-3,918.0	351.5	3,933.3	1.26	0.71	-1.04
14,926.0	89.69	175.40	10,881.1	-4,011.7	357.8	4,027.3	1.74	-0.74	-1.57
15,020.0	89.78	173.81	10,881.5	-4,105.3	366.7	4,121.3	1.69	0.10	-1.69
15,113.0	87.76	172.00	10,883.5	-4,197.6	378.1	4,214.2	2.92	-2.17	-1.95
15,229.0	91.99	173.30	10,883.8	-4,312.6	393.0	4,330.0	3.81	3.65	1.12
15,323.0	90.73	179.11	10,881.5	-4,406.3	399.2	4,423.9	6.32	-1.34	6.18
15,418.0	91.96	183.07	10,879.3	-4,501.3	397.4	4,518.4	4.36	1.29	4.17
15,511.0	91.49	182.56	10,876.5	-4,594.1	392.8	4,610.7	0.75	-0.51	-0.55
330' HL Crossed @ 15561.1'MD / 10875.3' TVD									
15,561.1	91.17	182.23	10,875.3	-4,644.2	390.7	4,660.4	0.91	-0.64	-0.65
15,605.0	90.89	181.95	10,874.5	-4,688.0	389.1	4,704.0	0.91	-0.64	-0.65
15,641.0	91.12	181.83	10,873.9	-4,724.0	387.9	4,739.8	0.72	0.64	-0.33
TD @ 15689.0' MD / 10873.0' TVD									
15,689.0	91.12	181.83	10,873.0	-4,772.0	386.4	4,787.5	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,137.3	2,134.9	6.0	4.8	330' HL Crossed @ 2137.3'MD / 2134.9' TVD
10,155.0	10,141.9	228.5	320.2	MWD Tie-in @ 10155.0' MD / 10141.9' TVD
10,884.1	10,795.9	4.4	341.0	330' HL Crossed @ 10884.1'MD / 10795.9' TVD
15,561.1	10,875.3	-4,644.2	390.7	330' HL Crossed @ 15561.1'MD / 10875.3' TVD
15,689.0	10,873.0	-4,772.0	386.4	TD @ 15689.0' MD / 10873.0' TVD

Checked By: _____ Approved By: _____ Date: _____