

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

Rec'd 06/05/2020 - NMOCD

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 30-015-44249	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 317788	⁵ Property Name REMUDA SOUTH 25 STATE	⁶ Well Number 105H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 3,061'

¹⁰ Surface Location

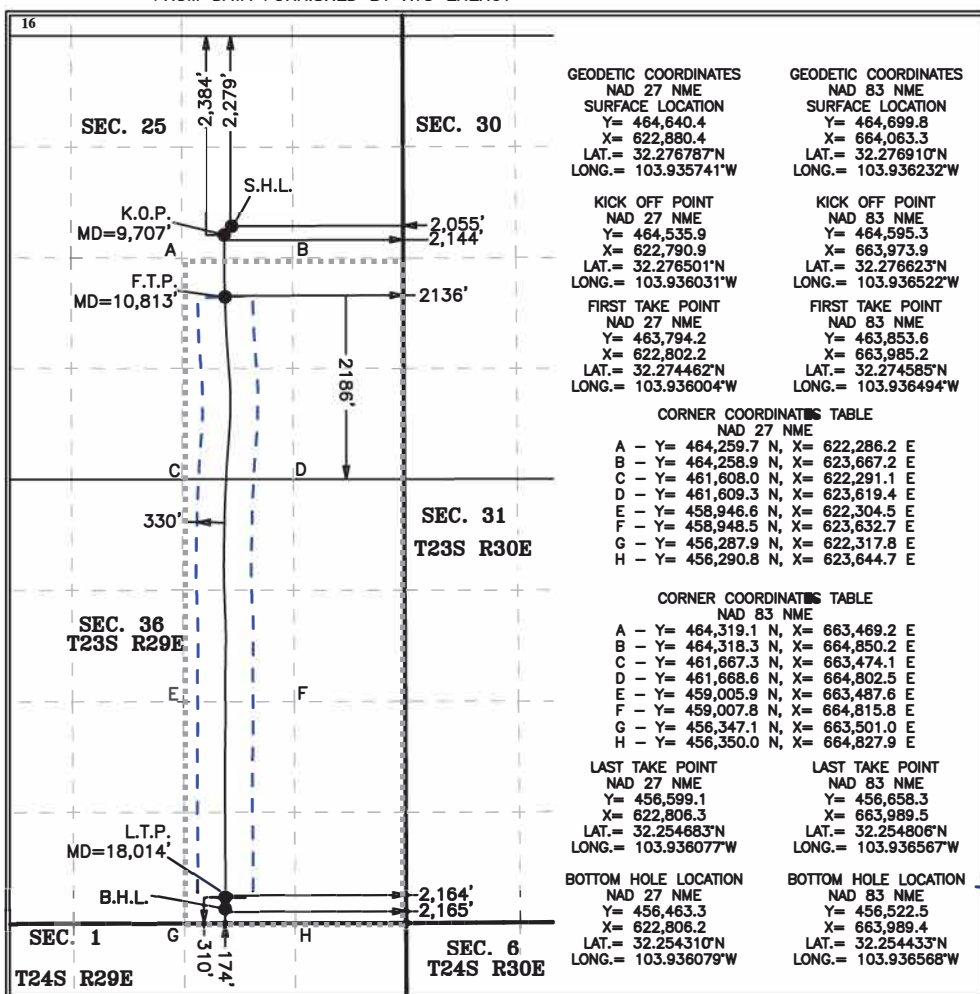
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	25	23 S	29 E		2,279	NORTH	2,055	EAST	EDDY

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
O	36	23 S	29 E		174	SOUTH	2,165	EAST	EDDY

¹² Dedicated Acres 480	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.

Cheryl Rowell 06/04/20
Signature Date

Cheryl Rowell

Printed Name

cheryl_rowell@xtoenergy

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.

6-4-2020

Date of Survey

Signature and Seal of
Professional Surveyor:

Mark Dillon Harp
MARK DILLON HARP 23786
Certificate Number



RR

2019010050

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

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

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



True Performance
Directional Drilling
5075 E 52nd Street
Odessa, TX 79762
(281)-222-8366

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 / **REMUDA SOUTH 25 STATE 105H / 30-015-44249**

Via: Electronic Filing

True Performance Directional Drilling, respectfully submits for filing the required directional certified survey performed on the referenced well by True Performance Directional Drilling. 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>
Greg Wilkie MWD Coordinator	115' to 18150'	8-16-18 to 9-17-18	MWD

The directional MWD surveys performed by True Performance Directional Drilling are attached. A copy of the certified plat on which the final survey is drawn and the projected bottom-hole location is marked and identified is also 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 'Greg Wilkie'.

Greg Wilkie
MWD Operations Manager

XTO Energy

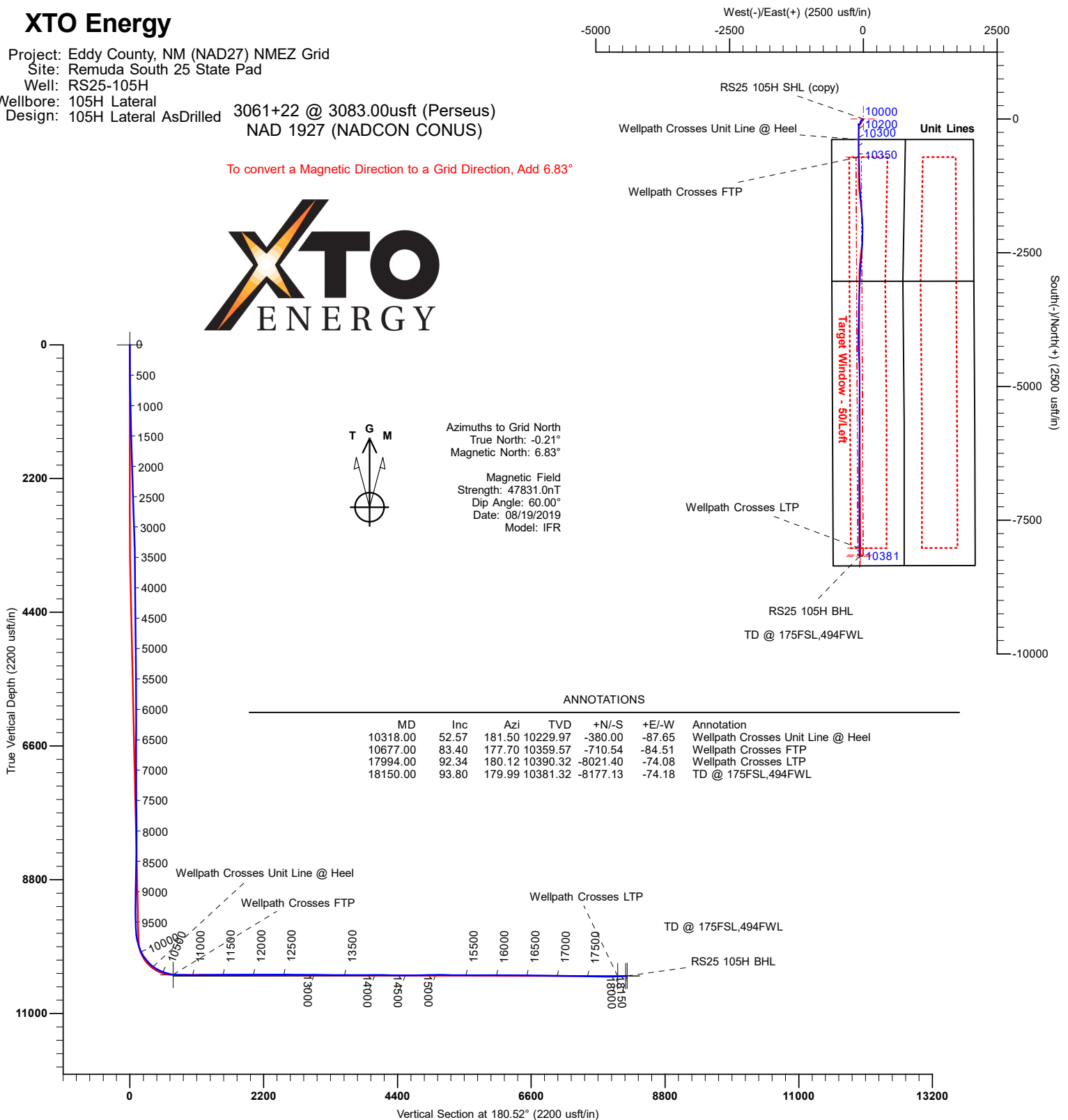
Project: Eddy County, NM (NAD27) NMEZ Grid

Site: Remuda South 25 State Pad

Well: RS25-105H

Wellbore: 105H Lateral
Design: 105H Lateral AsDrilled 3061+22 @ 3083.00usft (Perseus)
NAD 1927 (NADCON CONUS)

To convert a Magnetic Direction to a Grid Direction, Add 6.83°



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
RS25 105H SHL (copy)	0.00	0.00	0.00	464641.33	622881.65	Point
RS25 105H FTPr_330FNL_506FWL	10365.00	-711.00	-87.70	463930.33	622793.95	Point
RS25 105H BHL	10381.53	-8177.13	-74.18	456464.18	622807.47	Point
RS25 105H LTP_330FSL_509FWL (copy)	10385.00	-8021.40	-55.20	456619.91	622826.45	Point
RS25 105H PBHL_200FSL_509FWL (copy)	10385.00	-8151.40	-54.60	456489.91	622827.05	Point
Rectangle (Sides: L7440.00 W100.00)						

Design: 105H Lateral AsDrilled (RS25-105H/105H Lateral)

Created By: Mekka Williams

eSolina Well Design

mekka@esolinawelldesign.com

10:31, September 17 2019

TRUE PERFORMANCE DIRECTIONAL DRILLING

5075 E 52nd Street, Odessa, Texas 79762

281.222.8366



Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Project	Eddy County, NM (NAD27) NMEZ Grid		
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	Remuda South 25 State Pad		
Site Position:		Northing:	464,641.33 ft
From:	Map	Easting:	622,881.65 ft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	32° 16' 36.434 N
		Longitude:	103° 56' 8.666 W
		Grid Convergence:	0.21 °

Well	RS25-105H - Slot RS25 105H SHL		
Well Position	+N/-S	0.00 usft	Northing: 464,641.33 ft
	+E/-W	0.00 usft	Easting: 622,881.65 ft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 16' 36.434 N
		Longitude:	103° 56' 8.666 W
		Ground Level:	3,061.00 usft

Wellbore	105H Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	08/19/19	7.04	60.00	47,831

Design	105H Lateral AsDrilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	180.52	

Survey Program	Date	09/17/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
115.00	9,517.00	Survey #1 (105H Lateral)	MWD	OWSG MWD - Standard	
9,612.00	18,096.00	Survey #2 (105H Lateral)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	
18,150.00	18,150.00	Survey #3 (105H Lateral)	Projection	Projection	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RS25 105H SHL (copy) - RS25 126H SHL (copy) - RS25 125H SHL (copy) - RS25 166H SHL (copy)										
115.00	0.50	305.70	115.00	0.29	-0.41	-0.29	0.43	0.43	0.00	
135.00	0.20	275.60	135.00	0.35	-0.51	-0.34	1.71	-1.50	-150.50	
209.00	0.70	279.10	209.00	0.43	-1.09	-0.42	0.68	0.68	4.73	
241.00	0.50	284.60	240.99	0.50	-1.42	-0.48	0.65	-0.62	17.19	
341.00	0.90	272.60	340.99	0.64	-2.62	-0.62	0.42	0.40	-12.00	
421.00	1.30	252.90	420.97	0.40	-4.12	-0.37	0.68	0.50	-24.62	
517.00	1.70	231.90	516.94	-0.79	-6.28	0.85	0.70	0.42	-21.87	

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
612.00	1.60	243.10	611.90	-2.26	-8.57	2.34	0.35	-0.11	11.79	
708.00	1.80	241.90	707.86	-3.58	-11.10	3.68	0.21	0.21	-1.25	
803.00	2.10	244.90	802.80	-5.02	-13.99	5.15	0.33	0.32	3.16	
898.00	2.10	235.70	897.74	-6.74	-17.00	6.89	0.35	0.00	-9.68	
993.00	2.30	235.70	992.67	-8.80	-20.02	8.98	0.21	0.21	0.00	
1,050.00	2.10	239.00	1,049.63	-9.98	-21.86	10.18	0.42	-0.35	5.79	
1,145.00	1.50	233.70	1,144.58	-11.61	-24.35	11.83	0.65	-0.63	-5.58	
1,241.00	1.60	237.40	1,240.54	-13.08	-26.49	13.32	0.15	0.10	3.85	
1,337.00	1.80	221.80	1,336.50	-14.92	-28.63	15.18	0.52	0.21	-16.25	
1,431.00	2.00	220.70	1,430.45	-17.27	-30.68	17.54	0.22	0.21	-1.17	
1,526.00	2.10	218.40	1,525.39	-19.89	-32.84	20.18	0.14	0.11	-2.42	
1,622.00	2.10	220.50	1,621.33	-22.60	-35.08	22.92	0.08	0.00	2.19	
1,717.00	2.20	220.30	1,716.26	-25.32	-37.39	25.66	0.11	0.11	-0.21	
1,810.00	2.40	221.90	1,809.18	-28.13	-39.84	28.49	0.23	0.22	1.72	
1,906.00	2.50	220.40	1,905.10	-31.22	-42.54	31.60	0.12	0.10	-1.56	
2,001.00	2.40	218.20	2,000.01	-34.36	-45.11	34.77	0.14	-0.11	-2.32	
2,096.00	2.30	213.90	2,094.93	-37.51	-47.41	37.93	0.21	-0.11	-4.53	
2,191.00	2.50	223.60	2,189.85	-40.59	-49.90	41.04	0.48	0.21	10.21	
2,286.00	2.80	221.30	2,284.75	-43.83	-52.86	44.31	0.33	0.32	-2.42	
2,383.00	3.00	219.60	2,381.62	-47.57	-56.04	48.07	0.22	0.21	-1.75	
2,479.00	1.30	191.90	2,477.55	-50.57	-57.87	51.09	2.03	-1.77	-28.85	
2,573.00	1.20	159.60	2,571.53	-52.53	-57.74	53.06	0.75	-0.11	-34.36	
2,668.00	1.50	166.10	2,666.50	-54.67	-57.10	55.19	0.35	0.32	6.84	
2,763.00	1.90	166.20	2,761.46	-57.41	-56.42	57.92	0.42	0.42	0.11	
2,858.00	1.80	151.60	2,856.41	-60.25	-55.34	60.75	0.51	-0.11	-15.37	
2,954.00	2.20	151.30	2,952.35	-63.20	-53.74	63.68	0.42	0.42	-0.31	
3,060.00	2.90	153.50	3,058.25	-67.38	-51.56	67.84	0.67	0.66	2.08	
3,154.00	3.00	153.60	3,152.12	-71.71	-49.41	72.16	0.11	0.11	0.11	
3,240.00	2.00	161.90	3,238.04	-75.15	-47.94	75.58	1.23	-1.16	9.65	
3,335.00	1.00	216.00	3,333.01	-77.40	-47.91	77.83	1.71	-1.05	56.95	
3,430.00	1.40	244.30	3,427.99	-78.57	-49.45	79.02	0.74	0.42	29.79	
3,524.00	1.50	246.70	3,521.96	-79.56	-51.61	80.02	0.12	0.11	2.55	
3,618.00	1.10	241.60	3,615.94	-80.47	-53.53	80.96	0.44	-0.43	-5.43	
3,713.00	1.30	250.70	3,710.92	-81.26	-55.35	81.76	0.29	0.21	9.58	
3,808.00	1.40	250.50	3,805.89	-82.01	-57.46	82.53	0.11	0.11	-0.21	
3,902.00	1.30	254.00	3,899.86	-82.68	-59.57	83.22	0.14	-0.11	3.72	
3,998.00	1.50	247.30	3,995.84	-83.47	-61.78	84.03	0.27	0.21	-6.98	
4,093.00	1.40	250.50	4,090.81	-84.34	-64.02	84.91	0.14	-0.11	3.37	
4,188.00	1.50	237.60	4,185.77	-85.39	-66.16	85.99	0.36	0.11	-13.58	
4,282.00	1.50	235.10	4,279.74	-86.75	-68.21	87.37	0.07	0.00	-2.66	
4,377.00	1.50	235.30	4,374.71	-88.17	-70.25	88.81	0.01	0.00	0.21	
4,473.00	1.30	235.60	4,470.68	-89.50	-72.18	90.15	0.21	-0.21	0.31	
4,568.00	1.40	231.70	4,565.66	-90.83	-73.98	91.50	0.14	0.11	-4.11	

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,663.00	1.30	240.90	4,660.63	-92.07	-75.84	92.76	0.25	-0.11	9.68	
4,756.00	1.50	250.00	4,753.60	-93.00	-77.90	93.71	0.32	0.22	9.78	
4,851.00	1.40	236.60	4,848.57	-94.07	-80.04	94.79	0.37	-0.11	-14.11	
4,946.00	1.40	241.70	4,943.54	-95.26	-82.03	96.00	0.13	0.00	5.37	
5,041.00	1.40	251.80	5,038.51	-96.17	-84.15	96.93	0.26	0.00	10.63	
5,136.00	0.80	248.60	5,133.50	-96.77	-85.87	97.55	0.63	-0.63	-3.37	
5,231.00	0.40	231.60	5,228.49	-97.22	-86.75	98.01	0.46	-0.42	-17.89	
5,327.00	0.30	250.00	5,324.49	-97.52	-87.25	98.30	0.16	-0.10	19.17	
5,422.00	0.50	211.40	5,419.49	-97.96	-87.70	98.75	0.34	0.21	-40.63	
5,515.00	0.60	222.00	5,512.48	-98.66	-88.24	99.46	0.15	0.11	11.40	
5,610.00	0.50	240.30	5,607.48	-99.24	-88.93	100.04	0.21	-0.11	19.26	
5,705.00	0.20	181.60	5,702.48	-99.61	-89.30	100.42	0.45	-0.32	-61.79	
5,800.00	0.30	215.40	5,797.48	-99.98	-89.44	100.79	0.18	0.11	35.58	
5,894.00	0.60	187.30	5,891.47	-100.67	-89.65	101.48	0.39	0.32	-29.89	
5,991.00	0.60	202.80	5,988.47	-101.64	-89.91	102.45	0.17	0.00	15.98	
6,085.00	0.20	48.10	6,082.47	-101.98	-89.98	102.80	0.84	-0.43	-164.57	
6,180.00	0.50	36.90	6,177.46	-101.54	-89.61	102.35	0.32	0.32	-11.79	
6,276.00	0.50	36.90	6,273.46	-100.87	-89.10	101.68	0.00	0.00	0.00	
6,370.00	0.80	87.30	6,367.46	-100.51	-88.20	101.31	0.66	0.32	53.62	
6,465.00	1.30	54.30	6,462.44	-99.85	-86.66	100.63	0.81	0.53	-34.74	
6,560.00	0.10	134.10	6,557.43	-99.28	-85.73	100.05	1.35	-1.26	84.00	
6,654.00	0.30	149.40	6,651.43	-99.55	-85.55	100.32	0.22	0.21	16.28	
6,749.00	0.40	104.60	6,746.43	-99.85	-85.10	100.62	0.30	0.11	-47.16	
6,844.00	0.30	104.60	6,841.43	-99.99	-84.54	100.76	0.11	-0.11	0.00	
6,940.00	0.40	110.90	6,937.43	-100.18	-83.98	100.93	0.11	0.10	6.56	
7,036.00	0.40	157.00	7,033.42	-100.60	-83.54	101.36	0.33	0.00	48.02	
7,131.00	0.30	197.50	7,128.42	-101.15	-83.48	101.90	0.27	-0.11	42.63	
7,226.00	0.50	215.50	7,223.42	-101.72	-83.80	102.48	0.25	0.21	18.95	
7,321.00	0.70	219.00	7,318.41	-102.51	-84.40	103.27	0.21	0.21	3.68	
7,416.00	0.60	210.80	7,413.41	-103.39	-85.02	104.16	0.14	-0.11	-8.63	
7,517.00	1.10	233.30	7,514.40	-104.42	-86.07	105.20	0.59	0.50	22.28	
7,620.00	1.20	239.70	7,617.38	-105.56	-87.79	106.35	0.16	0.10	6.21	
7,716.00	1.20	255.20	7,713.36	-106.32	-89.63	107.13	0.34	0.00	16.15	
7,811.00	0.60	338.70	7,808.35	-106.11	-90.78	106.93	1.35	-0.63	87.89	
7,906.00	0.30	258.60	7,903.34	-105.70	-91.20	106.52	0.66	-0.32	-84.32	
8,001.00	1.50	184.30	7,998.33	-106.99	-91.54	107.81	1.52	1.26	-78.21	
8,096.00	1.80	165.00	8,093.29	-109.67	-91.25	110.49	0.66	0.32	-20.32	
8,190.00	3.20	44.80	8,187.24	-109.23	-89.01	110.03	4.67	1.49	-127.87	
8,284.00	1.40	65.40	8,281.17	-106.89	-86.12	107.67	2.08	-1.91	21.91	
8,379.00	1.10	37.60	8,376.14	-105.69	-84.51	106.45	0.70	-0.32	-29.26	
8,473.00	1.00	8.00	8,470.13	-104.16	-83.84	104.92	0.58	-0.11	-31.49	
8,569.00	1.20	1.80	8,566.11	-102.32	-83.70	103.08	0.24	0.21	-6.46	
8,665.00	1.70	331.70	8,662.08	-100.07	-84.34	100.83	0.93	0.52	-31.35	
8,759.00	1.70	316.00	8,756.04	-97.84	-85.97	98.61	0.49	0.00	-16.70	

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,854.00	1.10	22.50	8,851.02	-95.98	-86.60	96.76	1.70	-0.63	70.00
8,948.00	0.30	169.20	8,945.01	-95.39	-86.21	96.17	1.45	-0.85	156.06
9,043.00	1.10	7.10	9,040.01	-94.73	-86.05	95.50	1.46	0.84	-170.63
9,138.00	1.20	10.90	9,134.99	-92.85	-85.75	93.62	0.13	0.11	4.00
9,233.00	0.70	18.30	9,229.97	-91.32	-85.38	92.09	0.54	-0.53	7.79
9,328.00	0.90	37.70	9,324.97	-90.18	-84.74	90.94	0.35	0.21	20.42
9,422.00	1.30	191.10	9,418.96	-90.64	-84.49	91.40	2.28	0.43	163.19
9,517.00	2.00	206.10	9,513.92	-93.18	-85.43	93.96	0.86	0.74	15.79
9,612.00	3.60	203.60	9,608.80	-97.41	-87.35	98.20	1.69	1.68	-2.63
9,692.00	4.75	195.01	9,688.59	-102.91	-89.22	103.71	1.63	1.44	-10.74
9,740.00	7.91	183.55	9,736.29	-108.13	-89.94	108.94	7.06	6.58	-23.87
9,787.00	12.13	178.52	9,782.57	-116.29	-90.01	117.11	9.16	8.98	-10.70
9,834.00	15.60	179.38	9,828.19	-127.55	-89.81	128.36	7.40	7.38	1.83
9,882.00	16.22	179.68	9,874.35	-140.71	-89.71	141.52	1.30	1.29	0.62
9,929.00	19.30	177.10	9,919.11	-155.04	-89.28	155.84	6.76	6.55	-5.49
9,976.00	22.52	178.54	9,963.01	-171.79	-88.65	172.59	6.94	6.85	3.06
10,024.00	27.47	180.36	10,006.50	-192.07	-88.49	192.86	10.44	10.31	3.79
10,072.00	32.65	180.68	10,048.03	-216.10	-88.71	216.90	10.80	10.79	0.67
10,119.00	36.57	179.88	10,086.70	-242.79	-88.83	243.59	8.40	8.34	-1.70
10,167.00	40.11	178.86	10,124.35	-272.56	-88.50	273.35	7.49	7.37	-2.12
10,215.00	42.55	178.43	10,160.39	-304.25	-87.74	305.03	5.12	5.08	-0.90
10,263.00	46.98	179.47	10,194.46	-338.03	-87.14	338.81	9.35	9.23	2.17
10,311.00	51.85	181.59	10,225.68	-374.47	-87.50	375.25	10.68	10.15	4.42
10,318.00	52.57	181.50	10,229.97	-380.00	-87.65	380.78	10.30	10.25	-1.34
Wellpath Crosses Unit Line @ Heel									
10,359.00	56.77	180.98	10,253.67	-413.43	-88.36	414.22	10.30	10.25	-1.26
10,406.00	61.65	180.34	10,277.73	-453.79	-88.82	454.58	10.45	10.38	-1.36
10,454.00	66.54	179.75	10,298.69	-496.96	-88.85	497.74	10.25	10.19	-1.23
10,501.00	69.14	179.33	10,316.42	-540.48	-88.50	541.26	5.59	5.53	-0.89
10,549.00	71.87	178.89	10,332.43	-585.72	-87.80	586.49	5.75	5.69	-0.92
10,596.00	76.30	178.81	10,345.32	-630.90	-86.89	631.66	9.43	9.43	-0.17
10,644.00	80.53	178.22	10,354.96	-677.89	-85.67	678.64	8.89	8.81	-1.23
10,677.00	83.40	177.70	10,359.57	-710.54	-84.51	711.28	8.84	8.70	-1.58
Wellpath Crosses FTP									
10,677.89	83.48	177.69	10,359.67	-711.42	-84.47	712.16	8.84	8.70	-1.57
RS25 105H LP - RS25 105H FTP_r_330FNL_506FWL									
10,691.00	84.62	177.48	10,361.03	-724.45	-83.92	725.19	8.84	8.70	-1.56
10,703.34	85.37	177.38	10,362.11	-736.73	-83.37	737.46	6.10	6.04	-0.81
RS25 125H FTP_r_330FNL_671FWL - RS25 125H FTP_329FNL_671FWL (copy)									
10,736.29	87.36	177.11	10,364.20	-769.58	-81.79	770.29	6.10	6.04	-0.81
RS25 126H FTP_r_330FNL_14FEL - RS25 126H FTP_329FNL_14FEL (copy)									
10,739.00	87.52	177.09	10,364.32	-772.28	-81.65	772.99	6.10	6.04	-0.81
10,739.45	87.53	177.09	10,364.34	-772.73	-81.63	773.44	1.37	1.27	-0.52
RS25 166H FTP_329FNL_374FEL (copy)									

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
10,740.21	87.54	177.08	10,364.37	-773.49	-81.59	774.20	1.37	1.27	-0.52	
RS25 166H FTPr_330FNL_374FEL										
10,787.00	88.13	176.84	10,366.14	-820.18	-79.11	820.86	1.37	1.27	-0.52	
10,882.00	89.49	178.91	10,368.11	-915.09	-75.59	915.74	2.61	1.43	2.18	
10,978.00	89.67	178.40	10,368.82	-1,011.06	-73.34	1,011.68	0.56	0.19	-0.53	
11,073.00	89.93	178.07	10,369.15	-1,106.01	-70.41	1,106.61	0.44	0.27	-0.35	
11,168.00	91.56	177.47	10,367.91	-1,200.93	-66.72	1,201.48	1.83	1.72	-0.63	
11,261.00	91.87	176.92	10,365.13	-1,293.77	-62.17	1,294.29	0.68	0.33	-0.59	
11,357.00	90.95	176.52	10,362.77	-1,389.59	-56.68	1,390.04	1.04	-0.96	-0.42	
11,452.00	89.67	175.88	10,362.25	-1,484.37	-50.38	1,484.77	1.51	-1.35	-0.67	
11,548.00	89.67	175.32	10,362.81	-1,580.09	-43.02	1,580.41	0.58	0.00	-0.58	
11,643.00	90.11	175.22	10,362.99	-1,674.77	-35.18	1,675.02	0.47	0.46	-0.11	
11,738.00	91.08	174.75	10,362.00	-1,769.40	-26.88	1,769.57	1.13	1.02	-0.49	
11,833.00	91.08	176.58	10,360.21	-1,864.10	-19.70	1,864.20	1.93	0.00	1.93	
11,928.00	89.63	178.38	10,359.62	-1,959.00	-15.52	1,959.06	2.43	-1.53	1.89	
12,024.00	88.84	180.90	10,360.90	-2,054.98	-14.92	2,055.03	2.75	-0.82	2.62	
12,120.00	89.63	180.75	10,362.19	-2,150.96	-16.30	2,151.02	0.84	0.82	-0.16	
12,214.00	90.07	180.16	10,362.43	-2,244.96	-17.05	2,245.02	0.78	0.47	-0.63	
12,308.00	91.65	182.30	10,361.02	-2,338.92	-19.07	2,339.00	2.83	1.68	2.28	
12,404.00	90.95	184.26	10,358.84	-2,434.73	-24.56	2,434.86	2.17	-0.73	2.04	
12,499.00	89.58	184.75	10,358.40	-2,529.44	-32.02	2,529.62	1.53	-1.44	0.52	
12,595.00	88.40	184.85	10,360.10	-2,625.08	-40.05	2,625.34	1.23	-1.23	0.10	
12,691.00	88.92	184.42	10,362.34	-2,720.74	-47.80	2,721.06	0.70	0.54	-0.45	
12,786.00	89.36	183.62	10,363.77	-2,815.50	-54.46	2,815.87	0.96	0.46	-0.84	
12,882.00	89.98	183.00	10,364.32	-2,911.33	-60.01	2,911.76	0.91	0.65	-0.65	
12,978.00	90.46	182.58	10,363.95	-3,007.22	-64.68	3,007.68	0.66	0.50	-0.44	
13,073.00	88.79	182.66	10,364.57	-3,102.11	-69.02	3,102.61	1.76	-1.76	0.08	
13,169.00	89.10	182.63	10,366.34	-3,198.00	-73.45	3,198.53	0.32	0.32	-0.03	
13,265.00	90.24	182.32	10,366.89	-3,293.90	-77.60	3,294.47	1.23	1.19	-0.32	
13,361.00	88.75	181.48	10,367.74	-3,389.84	-80.78	3,390.44	1.78	-1.55	-0.87	
13,457.00	88.97	181.27	10,369.65	-3,485.80	-83.08	3,486.41	0.32	0.23	-0.22	
13,553.00	89.45	181.01	10,370.97	-3,581.77	-84.99	3,582.39	0.57	0.50	-0.27	
13,648.00	90.90	181.26	10,370.68	-3,676.75	-86.87	3,677.38	1.55	1.53	0.26	
13,743.00	91.52	180.99	10,368.68	-3,771.71	-88.74	3,772.36	0.71	0.65	-0.28	
13,838.00	90.51	181.97	10,366.99	-3,866.66	-91.19	3,867.32	1.48	-1.06	1.03	
13,934.00	89.27	180.04	10,367.18	-3,962.64	-92.88	3,963.31	2.39	-1.29	-2.01	
14,030.00	90.64	180.58	10,367.25	-4,058.63	-93.40	4,059.31	1.53	1.43	0.56	
14,126.00	88.84	179.45	10,367.69	-4,154.62	-93.42	4,155.30	2.21	-1.87	-1.18	
14,222.00	88.66	178.42	10,369.78	-4,250.58	-91.64	4,251.24	1.09	-0.19	-1.07	
14,318.00	88.79	177.31	10,371.92	-4,346.49	-88.06	4,347.11	1.16	0.14	-1.16	
14,413.00	89.23	178.11	10,373.56	-4,441.40	-84.27	4,441.98	0.96	0.46	0.84	
14,508.00	90.33	178.12	10,373.93	-4,536.35	-81.14	4,536.90	1.16	1.16	0.01	
14,603.00	90.73	177.39	10,373.05	-4,631.27	-77.42	4,631.78	0.88	0.42	-0.77	

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
14,698.00	91.21	177.05	10,371.44	-4,726.14	-72.81	4,726.61	0.62	0.51	-0.36	
14,794.00	92.00	179.35	10,368.75	-4,822.05	-69.80	4,822.49	2.53	0.82	2.40	
14,888.00	90.02	180.61	10,367.09	-4,916.03	-69.77	4,916.46	2.50	-2.11	1.34	
14,983.00	90.73	180.40	10,366.47	-5,011.02	-70.60	5,011.46	0.78	0.75	-0.22	
15,078.00	90.29	180.23	10,365.63	-5,106.02	-71.13	5,106.45	0.50	-0.46	-0.18	
15,173.00	88.35	181.02	10,366.75	-5,201.00	-72.16	5,201.44	2.20	-2.04	0.83	
15,268.00	88.70	180.88	10,369.20	-5,295.96	-73.74	5,296.41	0.40	0.37	-0.15	
15,363.00	89.58	180.40	10,370.62	-5,390.94	-74.80	5,391.39	1.06	0.93	-0.51	
15,460.00	90.46	180.09	10,370.59	-5,487.94	-75.21	5,488.39	0.96	0.91	-0.32	
15,555.00	88.88	179.25	10,371.14	-5,582.93	-74.66	5,583.38	1.88	-1.66	-0.88	
15,651.00	89.49	178.83	10,372.50	-5,678.91	-73.06	5,679.33	0.77	0.64	-0.44	
15,747.00	90.81	179.01	10,372.25	-5,774.89	-71.25	5,775.29	1.39	1.37	0.19	
15,840.00	89.71	180.72	10,371.83	-5,867.88	-71.03	5,868.28	2.19	-1.18	1.84	
15,936.00	90.68	180.57	10,371.50	-5,963.87	-72.11	5,964.28	1.02	1.01	-0.16	
16,031.00	89.23	180.70	10,371.58	-6,058.86	-73.16	6,059.28	1.53	-1.53	0.14	
16,126.00	90.33	180.33	10,371.94	-6,153.86	-74.02	6,154.28	1.22	1.16	-0.39	
16,221.00	89.19	181.98	10,372.34	-6,248.83	-75.93	6,249.26	2.11	-1.20	1.74	
16,316.00	89.89	181.26	10,373.10	-6,343.79	-78.62	6,344.24	1.06	0.74	-0.76	
16,411.00	90.68	180.67	10,372.63	-6,438.77	-80.22	6,439.24	1.04	0.83	-0.62	
16,506.00	88.35	179.79	10,373.43	-6,533.76	-80.60	6,534.22	2.62	-2.45	-0.93	
16,601.00	89.45	179.65	10,375.26	-6,628.74	-80.13	6,629.20	1.17	1.16	-0.15	
16,696.00	89.67	180.29	10,375.99	-6,723.74	-80.08	6,724.19	0.71	0.23	0.67	
16,791.00	90.73	180.00	10,375.66	-6,818.74	-80.32	6,819.18	1.16	1.12	-0.31	
16,887.00	88.40	179.99	10,376.38	-6,914.73	-80.32	6,915.17	2.43	-2.43	-0.01	
16,982.00	87.91	179.03	10,379.44	-7,009.67	-79.50	7,010.11	1.13	-0.52	-1.01	
17,077.00	89.05	179.12	10,381.96	-7,104.63	-77.97	7,105.04	1.20	1.20	0.09	
17,173.00	88.57	179.59	10,383.96	-7,200.60	-76.89	7,201.00	0.70	-0.50	0.49	
17,268.00	89.10	179.55	10,385.89	-7,295.58	-76.18	7,295.97	0.56	0.56	-0.04	
17,363.00	88.31	179.43	10,388.04	-7,390.55	-75.33	7,390.93	0.84	-0.83	-0.13	
17,458.00	89.32	179.28	10,390.00	-7,485.52	-74.26	7,485.89	1.07	1.06	-0.16	
17,551.00	90.11	179.17	10,390.46	-7,578.51	-73.00	7,578.86	0.86	0.85	-0.12	
17,646.00	88.04	180.22	10,392.00	-7,673.49	-72.50	7,673.83	2.44	-2.18	1.11	
17,741.00	89.27	180.30	10,394.23	-7,768.46	-72.93	7,768.80	1.30	1.29	0.08	
17,837.00	90.68	180.36	10,394.27	-7,864.46	-73.48	7,864.80	1.47	1.47	0.06	
17,933.00	91.56	180.17	10,392.39	-7,960.44	-73.93	7,960.78	0.94	0.92	-0.20	
17,959.92	91.90	180.15	10,391.58	-7,987.34	-74.00	7,987.69	1.28	1.28	-0.08	
RS25 166H LTP_200FSL_325FEL (copy)										
17,981.66	92.18	180.13	10,390.80	-8,009.06	-74.05	8,009.41	1.28	1.28	-0.08	
RS25 126H LTP_200FSL_36FWL (copy)										
17,984.74	92.22	180.13	10,390.68	-8,012.15	-74.06	8,012.49	1.28	1.28	-0.08	
RS25 125H LTP_200FSL_655FEL (copy)										
17,994.00	92.34	180.12	10,390.32	-8,021.40	-74.08	8,021.74	1.28	1.28	-0.08	
Wellpath Crosses LTP										
17,994.20	92.34	180.12	10,390.31	-8,021.60	-74.08	8,021.95	0.00	0.00	0.00	
RS25 105H LTP_330FSL_509FWL (copy)										

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
18,029.00	92.79	180.09	10,388.75	-8,056.36	-74.14	8,056.71	1.29	1.29	-0.08	
18,066.66	93.36	180.03	10,386.73	-8,093.97	-74.18	8,094.30	1.51	1.51	-0.15	
RS25 166H PBHL_330FSL_324FEL (copy)										
18,096.00	93.80	179.99	10,384.90	-8,123.25	-74.19	8,123.59	1.51	1.51	-0.15	
18,104.62	93.80	179.99	10,384.33	-8,131.86	-74.19	8,132.20	0.00	0.00	0.00	
RS25 126H PBHL_330FSL_36FWL (copy)										
18,106.53	93.80	179.99	10,384.20	-8,133.75	-74.19	8,134.09	0.00	0.00	0.00	
RS25 125H PBHL_330FSL_654FEL (copy)										
18,124.08	93.80	179.99	10,383.04	-8,151.27	-74.19	8,151.61	0.00	0.00	0.00	
RS25 105H PBHL_200FSL_509FWL (copy)										
18,149.98	93.80	179.99	10,381.32	-8,177.12	-74.18	8,177.45	0.00	0.00	0.00	
RS25 105H BHL										
18,150.00	93.80	179.99	10,381.32	-8,177.13	-74.18	8,177.47	0.00	0.00	0.00	
TD @ 175FSL,494FWL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
RS25 105H SHL (copy)	0.00	0.00	0.00	0.00	0.00	464,641.33	622,881.65	32° 16' 36.434 N	103° 56' 8.666 W	
- hit/miss target										
- Shape										
- actual wellpath hits target center										
- Point										
RS25 105H FTPr_330FSL	0.00	0.00	10,365.00	-711.00	-87.70	463,930.33	622,793.95	32° 16' 29.402 N	103° 56' 9.718 W	
- actual wellpath misses target center by 6.25usft at 10677.89usft MD (10359.67 TVD, -711.42 N, -84.47 E)										
- Point										
RS25 105H BHL	0.00	0.00	10,381.53	-8,177.13	-74.18	456,464.18	622,807.47	32° 15' 15.516 N	103° 56' 9.883 W	
- actual wellpath misses target center by 0.21usft at 18149.98usft MD (10381.32 TVD, -8177.12 N, -74.18 E)										
- Point										
RS25 105H PBHL_200F	0.00	0.00	10,385.00	-8,151.40	-54.60	456,489.91	622,827.05	32° 15' 15.770 N	103° 56' 9.653 W	
- actual wellpath misses target center by 19.68usft at 18124.08usft MD (10383.04 TVD, -8151.27 N, -74.19 E)										
- Rectangle (sides W100.00 H7,440.00 D0.00)										
RS25 105H LTP_330FS	0.00	0.01	10,385.00	-8,021.40	-55.20	456,619.91	622,826.45	32° 15' 17.056 N	103° 56' 9.655 W	
- actual wellpath misses target center by 19.61usft at 17994.18usft MD (10390.31 TVD, -8021.58 N, -74.08 E)										
- Point										

Survey Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-105H - Slot RS25 105H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Well:	RS25-105H	North Reference:	Grid
Wellbore:	105H Lateral	Survey Calculation Method:	Minimum Curvature
Design:	105H Lateral AsDrilled	Database:	TP_EDM

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,318.00	10,229.97	-380.00	-87.65	Wellpath Crosses Unit Line @ Heel
10,677.00	10,359.57	-710.54	-84.51	Wellpath Crosses FTP
17,994.00	10,390.32	-8,021.40	-74.08	Wellpath Crosses LTP
18,150.00	10,381.32	-8,177.13	-74.18	TD @ 175FSL,494FWL

Checked By: _____ Approved By: _____ Date: _____