

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

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
		Grid Convergence:	0.21 °

Well	RS25-166H - Slot RS25 166H SHL		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	59.80 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:

Wellbore	166H Lateral		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	05/16/19	6.92
			Dip Angle
			(°)
			Field Strength
			(nT)
			47.737

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			177.33

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,677.71	2.78	113.86	3,677.61	-2.72	6.15	1.00	1.00	0.00	113.86	
10,766.37	2.78	113.86	10,757.94	-141.65	320.26	0.00	0.00	0.00	0.00	
11,651.95	89.69	179.75	11,319.00	-711.30	347.50	10.00	9.81	7.44	65.92	RS25 166H FTPr_330
19,091.13	89.69	179.75	11,359.00	-8,150.30	380.60	0.00	0.00	0.00	0.00	RS25 166H PBHL_330

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
228.00	0.00	0.00	228.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler Anh.									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
304.00	0.00	0.00	304.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Rustler Anh.									
325.00	0.00	0.00	325.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado Sh. Lm.									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
433.00	0.00	0.00	433.00	0.00	0.00	0.00	0.00	0.00	0.00
Est. Top of Salt									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,010.00	0.00	0.00	3,010.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,284.00	0.00	0.00	3,284.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar Lm. (Del Mtn Grp.)									
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,306.00	0.00	0.00	3,306.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon Ss.									
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	1.00	113.86	3,500.00	-0.35	0.80	0.39	1.00	1.00	0.00
3,600.00	2.00	113.86	3,599.96	-1.41	3.19	1.56	1.00	1.00	0.00
3,677.71	2.78	113.86	3,677.61	-2.72	6.15	3.01	1.00	1.00	0.00

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Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)
3,700.00	2.78	113.86	3,699.87	-3.16	7.14	3.49	0.00	0.00	0.00
3,800.00	2.78	113.86	3,799.75	-5.12	11.57	5.65	0.00	0.00	0.00
3,900.00	2.78	113.86	3,899.63	-7.08	16.00	7.82	0.00	0.00	0.00
4,000.00	2.78	113.86	3,999.51	-9.04	20.43	9.98	0.00	0.00	0.00
4,100.00	2.78	113.86	4,099.40	-11.00	24.87	12.15	0.00	0.00	0.00
4,148.66	2.78	113.86	4,148.00	-11.95	27.02	13.20	0.00	0.00	0.00
Cherry Canyon Ss.									
4,200.00	2.78	113.86	4,199.28	-12.96	29.30	14.31	0.00	0.00	0.00
4,300.00	2.78	113.86	4,299.16	-14.92	33.73	16.47	0.00	0.00	0.00
4,400.00	2.78	113.86	4,399.04	-16.88	38.16	18.64	0.00	0.00	0.00
4,500.00	2.78	113.86	4,498.93	-18.84	42.59	20.80	0.00	0.00	0.00
4,600.00	2.78	113.86	4,598.81	-20.80	47.02	22.97	0.00	0.00	0.00
4,700.00	2.78	113.86	4,698.69	-22.76	51.45	25.13	0.00	0.00	0.00
4,800.00	2.78	113.86	4,798.57	-24.72	55.88	27.30	0.00	0.00	0.00
4,900.00	2.78	113.86	4,898.46	-26.68	60.31	29.46	0.00	0.00	0.00
5,000.00	2.78	113.86	4,998.34	-28.64	64.75	31.63	0.00	0.00	0.00
5,100.00	2.78	113.86	5,098.22	-30.60	69.18	33.79	0.00	0.00	0.00
5,200.00	2.78	113.86	5,198.10	-32.56	73.61	35.95	0.00	0.00	0.00
5,300.00	2.78	113.86	5,297.99	-34.52	78.04	38.12	0.00	0.00	0.00
5,400.00	2.78	113.86	5,397.87	-36.48	82.47	40.28	0.00	0.00	0.00
5,500.00	2.78	113.86	5,497.75	-38.44	86.90	42.45	0.00	0.00	0.00
5,600.00	2.78	113.86	5,597.63	-40.40	91.33	44.61	0.00	0.00	0.00
5,700.00	2.78	113.86	5,697.52	-42.36	95.76	46.78	0.00	0.00	0.00
5,763.56	2.78	113.86	5,761.00	-43.60	98.58	48.15	0.00	0.00	0.00
Brushy Canyon Ss.									
5,800.00	2.78	113.86	5,797.40	-44.32	100.19	48.94	0.00	0.00	0.00
5,900.00	2.78	113.86	5,897.28	-46.28	104.62	51.11	0.00	0.00	0.00
6,000.00	2.78	113.86	5,997.16	-48.24	109.06	53.27	0.00	0.00	0.00
6,100.00	2.78	113.86	6,097.05	-50.20	113.49	55.43	0.00	0.00	0.00
6,200.00	2.78	113.86	6,196.93	-52.15	117.92	57.60	0.00	0.00	0.00
6,300.00	2.78	113.86	6,296.81	-54.11	122.35	59.76	0.00	0.00	0.00
6,400.00	2.78	113.86	6,396.69	-56.07	126.78	61.93	0.00	0.00	0.00
6,500.00	2.78	113.86	6,496.58	-58.03	131.21	64.09	0.00	0.00	0.00
6,600.00	2.78	113.86	6,596.46	-59.99	135.64	66.26	0.00	0.00	0.00
6,700.00	2.78	113.86	6,696.34	-61.95	140.07	68.42	0.00	0.00	0.00
6,799.78	2.78	113.86	6,796.00	-63.91	144.49	70.58	0.00	0.00	0.00
Lower Brushy Canyon Ss.									
6,800.00	2.78	113.86	6,796.22	-63.91	144.50	70.58	0.00	0.00	0.00
6,900.00	2.78	113.86	6,896.11	-65.87	148.94	72.75	0.00	0.00	0.00
7,000.00	2.78	113.86	6,995.99	-67.83	153.37	74.91	0.00	0.00	0.00
7,061.08	2.78	113.86	7,057.00	-69.03	156.07	76.24	0.00	0.00	0.00
Bone Spring Lm.									
7,100.00	2.78	113.86	7,095.87	-69.79	157.80	77.08	0.00	0.00	0.00
7,158.20	2.78	113.86	7,154.00	-70.93	160.38	78.34	0.00	0.00	0.00
Avalon Ss.									
7,200.00	2.78	113.86	7,195.75	-71.75	162.23	79.24	0.00	0.00	0.00
7,227.28	2.78	113.86	7,223.00	-72.29	163.44	79.83	0.00	0.00	0.00
Bone Spg. Upper Avalon Lm.									
7,300.00	2.78	113.86	7,295.64	-73.71	166.66	81.41	0.00	0.00	0.00
7,314.38	2.78	113.86	7,310.00	-74.00	167.30	81.72	0.00	0.00	0.00
Bone Spg. Avalon Sh.									
7,400.00	2.78	113.86	7,395.52	-75.67	171.09	83.57	0.00	0.00	0.00
7,500.00	2.78	113.86	7,495.40	-77.63	175.52	85.74	0.00	0.00	0.00

Planning Report

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Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)
7,522.62	2.78	113.86	7,518.00	-78.08	176.52	86.23	0.00	0.00	0.00
Bone Spg. Lower Avalon Lm									
7,600.00	2.78	113.86	7,595.28	-79.59	179.95	87.90	0.00	0.00	0.00
7,700.00	2.78	113.86	7,695.17	-81.55	184.38	90.06	0.00	0.00	0.00
7,800.00	2.78	113.86	7,795.05	-83.51	188.82	92.23	0.00	0.00	0.00
7,900.00	2.78	113.86	7,894.93	-85.47	193.25	94.39	0.00	0.00	0.00
8,000.00	2.78	113.86	7,994.82	-87.43	197.68	96.56	0.00	0.00	0.00
8,082.28	2.78	113.86	8,077.00	-89.04	201.32	98.34	0.00	0.00	0.00
First Bone Spring Ss.									
8,100.00	2.78	113.86	8,094.70	-89.39	202.11	98.72	0.00	0.00	0.00
8,200.00	2.78	113.86	8,194.58	-91.35	206.54	100.89	0.00	0.00	0.00
8,300.00	2.78	113.86	8,294.46	-93.31	210.97	103.05	0.00	0.00	0.00
8,396.65	2.78	113.86	8,391.00	-95.21	215.25	105.14	0.00	0.00	0.00
Second Bone Spring Lm.									
8,400.00	2.78	113.86	8,394.35	-95.27	215.40	105.21	0.00	0.00	0.00
8,500.00	2.78	113.86	8,494.23	-97.23	219.83	107.38	0.00	0.00	0.00
8,600.00	2.78	113.86	8,594.11	-99.19	224.26	109.54	0.00	0.00	0.00
8,700.00	2.78	113.86	8,693.99	-101.15	228.69	111.71	0.00	0.00	0.00
8,800.00	2.78	113.86	8,793.88	-103.11	233.13	113.87	0.00	0.00	0.00
8,900.00	2.78	113.86	8,893.76	-105.07	237.56	116.04	0.00	0.00	0.00
8,908.25	2.78	113.86	8,902.00	-105.23	237.92	116.22	0.00	0.00	0.00
Second Bone Spring Ss.									
9,000.00	2.78	113.86	8,993.64	-107.03	241.99	118.20	0.00	0.00	0.00
9,100.00	2.78	113.86	9,093.52	-108.99	246.42	120.37	0.00	0.00	0.00
9,200.00	2.78	113.86	9,193.41	-110.95	250.85	122.53	0.00	0.00	0.00
9,213.61	2.78	113.86	9,207.00	-111.22	251.45	122.82	0.00	0.00	0.00
Third Bone Spring Lm.									
9,300.00	2.78	113.86	9,293.29	-112.91	255.28	124.69	0.00	0.00	0.00
9,400.00	2.78	113.86	9,393.17	-114.87	259.71	126.86	0.00	0.00	0.00
9,500.00	2.78	113.86	9,493.05	-116.83	264.14	129.02	0.00	0.00	0.00
9,600.00	2.78	113.86	9,592.94	-118.79	268.57	131.19	0.00	0.00	0.00
9,700.00	2.78	113.86	9,692.82	-120.75	273.01	133.35	0.00	0.00	0.00
9,800.00	2.78	113.86	9,792.70	-122.71	277.44	135.52	0.00	0.00	0.00
9,900.00	2.78	113.86	9,892.58	-124.67	281.87	137.68	0.00	0.00	0.00
10,000.00	2.78	113.86	9,992.47	-126.63	286.30	139.85	0.00	0.00	0.00
10,001.54	2.78	113.86	9,994.00	-126.66	286.37	139.88	0.00	0.00	0.00
Third Bone Spring Ss.									
10,100.00	2.78	113.86	10,092.35	-128.59	290.73	142.01	0.00	0.00	0.00
10,200.00	2.78	113.86	10,192.23	-130.55	295.16	144.17	0.00	0.00	0.00
10,300.00	2.78	113.86	10,292.11	-132.51	299.59	146.34	0.00	0.00	0.00
10,313.90	2.78	113.86	10,306.00	-132.78	300.21	146.64	0.00	0.00	0.00
Wolfcamp Sh.									
10,353.95	2.78	113.86	10,346.00	-133.57	301.98	147.51	0.00	0.00	0.00
Wolfcamp X Ss.									
10,364.31	2.78	113.86	10,356.35	-133.77	302.44	147.73	0.00	0.00	0.00
RS25 105H FTP_329FNL_506FWL (copy)									
10,372.97	2.78	113.86	10,365.00	-133.94	302.83	147.92	0.00	0.00	0.00
LP									
10,400.00	2.78	113.86	10,392.00	-134.47	304.02	148.50	0.00	0.00	0.00
10,432.04	2.78	113.86	10,424.00	-135.10	305.44	149.20	0.00	0.00	0.00
Wolfcamp Y Ss.									
10,500.00	2.78	113.86	10,491.88	-136.43	308.45	150.67	0.00	0.00	0.00
10,600.00	2.78	113.86	10,591.76	-138.39	312.89	152.83	0.00	0.00	0.00

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)
10,630.31	2.78	113.86	10,622.04	-138.98	314.23	153.49	0.00	0.00	0.00
RS25 125H FTP_329FNL_671FWL (copy)									
10,676.87	2.78	113.86	10,668.55	-139.89	316.29	154.50	0.00	0.00	0.00
RS25 126H FTP_329FNL_1 FEL (copy)									
10,700.00	2.78	113.86	10,691.64	-140.35	317.32	155.00	0.00	0.00	0.00
10,766.37	2.78	113.86	10,757.94	-141.65	320.26	156.43	0.00	0.00	0.00
10,800.00	5.16	150.40	10,791.49	-143.29	321.75	158.15	10.00	7.09	108.66
10,850.00	9.83	164.95	10,841.05	-149.37	323.97	164.32	10.00	9.33	29.09
10,900.00	14.71	170.05	10,889.90	-159.75	326.18	174.79	10.00	9.77	10.21
10,950.00	19.65	172.64	10,937.65	-174.36	328.35	189.48	10.00	9.88	5.17
11,000.00	24.62	174.21	10,983.95	-193.07	330.48	208.27	10.00	9.93	3.15
11,050.00	29.60	175.29	11,028.44	-215.75	332.55	231.03	10.00	9.95	2.15
11,100.00	34.58	176.08	11,070.79	-242.23	334.53	257.57	10.00	9.97	1.58
11,150.00	39.56	176.69	11,110.68	-272.30	336.43	287.69	10.00	9.97	1.22
11,200.00	44.55	177.18	11,147.79	-305.73	338.21	321.18	10.00	9.98	0.99
11,250.00	49.54	177.59	11,181.84	-342.28	339.87	357.76	10.00	9.98	0.83
11,300.00	54.54	177.95	11,212.59	-381.66	341.40	397.17	10.00	9.98	0.71
11,350.00	59.53	178.27	11,239.79	-423.57	342.78	439.10	10.00	9.99	0.63
11,400.00	64.52	178.55	11,263.23	-467.70	344.00	483.24	10.00	9.99	0.57
11,450.00	69.52	178.81	11,282.75	-513.71	345.06	529.24	10.00	9.99	0.52
11,500.00	74.51	179.06	11,298.18	-561.24	345.95	576.77	10.00	9.99	0.49
11,550.00	79.51	179.29	11,309.42	-609.94	346.65	625.45	10.00	9.99	0.47
11,600.00	84.50	179.51	11,316.37	-659.44	347.17	674.91	10.00	9.99	0.45
11,651.15	89.61	179.74	11,319.00	-710.50	347.50	725.94	10.00	9.99	0.44
RS25 166H FTP_329FNL_37 FEL (copy) - RS25 166H LP									
11,651.95	89.69	179.75	11,319.00	-711.30	347.50	726.73	10.00	9.99	0.44
RS25 166H FTPr_330FNL_37 FEL									
11,700.00	89.69	179.75	11,319.26	-759.35	347.71	774.74	0.00	0.00	0.00
11,800.00	89.69	179.75	11,319.80	-859.35	348.16	874.65	0.00	0.00	0.00
11,900.00	89.69	179.75	11,320.33	-959.34	348.60	974.56	0.00	0.00	0.00
12,000.00	89.69	179.75	11,320.87	-1,059.34	349.05	1,074.47	0.00	0.00	0.00
12,100.00	89.69	179.75	11,321.41	-1,159.34	349.49	1,174.38	0.00	0.00	0.00
12,200.00	89.69	179.75	11,321.95	-1,259.34	349.94	1,274.29	0.00	0.00	0.00
12,300.00	89.69	179.75	11,322.48	-1,359.34	350.38	1,374.20	0.00	0.00	0.00
12,400.00	89.69	179.75	11,323.02	-1,459.33	350.83	1,474.11	0.00	0.00	0.00
12,500.00	89.69	179.75	11,323.56	-1,559.33	351.27	1,574.02	0.00	0.00	0.00
12,600.00	89.69	179.75	11,324.10	-1,659.33	351.72	1,673.93	0.00	0.00	0.00
12,700.00	89.69	179.75	11,324.64	-1,759.33	352.16	1,773.84	0.00	0.00	0.00
12,800.00	89.69	179.75	11,325.17	-1,859.32	352.61	1,873.75	0.00	0.00	0.00
12,900.00	89.69	179.75	11,325.71	-1,959.32	353.05	1,973.66	0.00	0.00	0.00
13,000.00	89.69	179.75	11,326.25	-2,059.32	353.50	2,073.56	0.00	0.00	0.00
13,100.00	89.69	179.75	11,326.79	-2,159.32	353.94	2,173.47	0.00	0.00	0.00
13,200.00	89.69	179.75	11,327.32	-2,259.31	354.39	2,273.38	0.00	0.00	0.00
13,300.00	89.69	179.75	11,327.86	-2,359.31	354.83	2,373.29	0.00	0.00	0.00
13,400.00	89.69	179.75	11,328.40	-2,459.31	355.28	2,473.20	0.00	0.00	0.00
13,500.00	89.69	179.75	11,328.94	-2,559.31	355.72	2,573.11	0.00	0.00	0.00
13,600.00	89.69	179.75	11,329.47	-2,659.30	356.17	2,673.02	0.00	0.00	0.00
13,700.00	89.69	179.75	11,330.01	-2,759.30	356.61	2,772.93	0.00	0.00	0.00
13,800.00	89.69	179.75	11,330.55	-2,859.30	357.06	2,872.84	0.00	0.00	0.00
13,900.00	89.69	179.75	11,331.09	-2,959.30	357.50	2,972.75	0.00	0.00	0.00
14,000.00	89.69	179.75	11,331.63	-3,059.29	357.95	3,072.66	0.00	0.00	0.00
14,100.00	89.69	179.75	11,332.16	-3,159.29	358.39	3,172.57	0.00	0.00	0.00
14,200.00	89.69	179.75	11,332.70	-3,259.29	358.84	3,272.48	0.00	0.00	0.00

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)
14,300.00	89.69	179.75	11,333.24	-3,359.29	359.28	3,372.39	0.00	0.00	0.00
14,400.00	89.69	179.75	11,333.78	-3,459.28	359.73	3,472.30	0.00	0.00	0.00
14,500.00	89.69	179.75	11,334.31	-3,559.28	360.17	3,572.21	0.00	0.00	0.00
14,600.00	89.69	179.75	11,334.85	-3,659.28	360.62	3,672.12	0.00	0.00	0.00
14,700.00	89.69	179.75	11,335.39	-3,759.28	361.06	3,772.03	0.00	0.00	0.00
14,800.00	89.69	179.75	11,335.93	-3,859.27	361.51	3,871.94	0.00	0.00	0.00
14,900.00	89.69	179.75	11,336.46	-3,959.27	361.95	3,971.85	0.00	0.00	0.00
15,000.00	89.69	179.75	11,337.00	-4,059.27	362.40	4,071.75	0.00	0.00	0.00
15,100.00	89.69	179.75	11,337.54	-4,159.27	362.84	4,171.66	0.00	0.00	0.00
15,200.00	89.69	179.75	11,338.08	-4,259.26	363.29	4,271.57	0.00	0.00	0.00
15,300.00	89.69	179.75	11,338.62	-4,359.26	363.73	4,371.48	0.00	0.00	0.00
15,400.00	89.69	179.75	11,339.15	-4,459.26	364.18	4,471.39	0.00	0.00	0.00
15,500.00	89.69	179.75	11,339.69	-4,559.26	364.62	4,571.30	0.00	0.00	0.00
15,600.00	89.69	179.75	11,340.23	-4,659.25	365.07	4,671.21	0.00	0.00	0.00
15,700.00	89.69	179.75	11,340.77	-4,759.25	365.51	4,771.12	0.00	0.00	0.00
15,800.00	89.69	179.75	11,341.30	-4,859.25	365.96	4,871.03	0.00	0.00	0.00
15,900.00	89.69	179.75	11,341.84	-4,959.25	366.40	4,970.94	0.00	0.00	0.00
16,000.00	89.69	179.75	11,342.38	-5,059.25	366.85	5,070.85	0.00	0.00	0.00
16,100.00	89.69	179.75	11,342.92	-5,159.24	367.29	5,170.76	0.00	0.00	0.00
16,200.00	89.69	179.75	11,343.45	-5,259.24	367.74	5,270.67	0.00	0.00	0.00
16,300.00	89.69	179.75	11,343.99	-5,359.24	368.18	5,370.58	0.00	0.00	0.00
16,400.00	89.69	179.75	11,344.53	-5,459.24	368.63	5,470.49	0.00	0.00	0.00
16,500.00	89.69	179.75	11,345.07	-5,559.23	369.07	5,570.40	0.00	0.00	0.00
16,600.00	89.69	179.75	11,345.61	-5,659.23	369.52	5,670.31	0.00	0.00	0.00
16,700.00	89.69	179.75	11,346.14	-5,759.23	369.96	5,770.22	0.00	0.00	0.00
16,800.00	89.69	179.75	11,346.68	-5,859.23	370.41	5,870.13	0.00	0.00	0.00
16,900.00	89.69	179.75	11,347.22	-5,959.22	370.85	5,970.03	0.00	0.00	0.00
17,000.00	89.69	179.75	11,347.76	-6,059.22	371.30	6,069.94	0.00	0.00	0.00
17,100.00	89.69	179.75	11,348.29	-6,159.22	371.74	6,169.85	0.00	0.00	0.00
17,200.00	89.69	179.75	11,348.83	-6,259.22	372.19	6,269.76	0.00	0.00	0.00
17,300.00	89.69	179.75	11,349.37	-6,359.21	372.63	6,369.67	0.00	0.00	0.00
17,400.00	89.69	179.75	11,349.91	-6,459.21	373.08	6,469.58	0.00	0.00	0.00
17,500.00	89.69	179.75	11,350.44	-6,559.21	373.52	6,569.49	0.00	0.00	0.00
17,600.00	89.69	179.75	11,350.98	-6,659.21	373.97	6,669.40	0.00	0.00	0.00
17,700.00	89.69	179.75	11,351.52	-6,759.20	374.41	6,769.31	0.00	0.00	0.00
17,800.00	89.69	179.75	11,352.06	-6,859.20	374.86	6,869.22	0.00	0.00	0.00
17,900.00	89.69	179.75	11,352.60	-6,959.20	375.30	6,969.13	0.00	0.00	0.00
18,000.00	89.69	179.75	11,353.13	-7,059.20	375.75	7,069.04	0.00	0.00	0.00
18,100.00	89.69	179.75	11,353.67	-7,159.19	376.19	7,168.95	0.00	0.00	0.00
18,200.00	89.69	179.75	11,354.21	-7,259.19	376.64	7,268.86	0.00	0.00	0.00
18,300.00	89.69	179.75	11,354.75	-7,359.19	377.08	7,368.77	0.00	0.00	0.00
18,400.00	89.69	179.75	11,355.28	-7,459.19	377.52	7,468.68	0.00	0.00	0.00
18,500.00	89.69	179.75	11,355.82	-7,559.18	377.97	7,568.59	0.00	0.00	0.00
18,600.00	89.69	179.75	11,356.36	-7,659.18	378.41	7,668.50	0.00	0.00	0.00
18,700.00	89.69	179.75	11,356.90	-7,759.18	378.86	7,768.41	0.00	0.00	0.00
18,800.00	89.69	179.75	11,357.43	-7,859.18	379.30	7,868.32	0.00	0.00	0.00
18,900.00	89.69	179.75	11,357.97	-7,959.17	379.75	7,968.22	0.00	0.00	0.00
18,954.79	89.69	179.75	11,358.27	-8,013.96	379.99	8,022.97	0.00	0.00	0.00
RS25 105H LTP_200FSL_509FWL (copy)									
18,956.48	89.69	179.75	11,358.28	-8,015.65	380.00	8,024.65	0.00	0.00	0.00
RS25 125H LTP_200FSL_655FEL (copy)									
18,958.21	89.69	179.75	11,358.29	-8,017.38	380.01	8,026.38	0.00	0.00	0.00
RS25 126H LTP_200FSL_36FWL (copy)									

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Planned 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)
18,961.13	89.69	179.75	11,358.30	-8,020.30	380.02	8,029.30	0.00	0.00	0.00
RS25 166H LTP_200FSL_325FEL (copy)									
19,000.00	89.69	179.75	11,358.51	-8,059.17	380.19	8,068.13	0.00	0.00	0.00
19,084.79	89.69	179.75	11,358.97	-8,143.96	380.57	8,152.85	0.00	0.00	0.00
RS25 105H PBHL_330FSL_509FWL (copy) - RS25 125H PBHL_330FSL_65 FEL (copy)									
19,091.13	89.69	179.75	11,359.00	-8,150.30	380.60	8,159.18	0.00	0.00	0.00
RS25 166H PBHL_330FSL_32 FEL (copy)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (ft)	Easting (ft)	Latitude	Longitude
RS25 166H SHL (copy)	0.00	0.00	0.00	0.00	0.00	464,641.33	622,941.45	32° 16' 36.432 N	103° 56' 7.969 W
- plan hits target center									
- Point									
RS25 166H FTPr_330FI	0.00	0.00	11,319.00	-711.30	347.50	463,930.03	623,288.95	32° 16' 29.380 N	103° 56' 3.953 W
- plan hits target center									
- Point									
RS25 166H LP	0.00	0.00	11,319.00	-710.50	347.50	463,930.83	623,288.95	32° 16' 29.388 N	103° 56' 3.953 W
- plan misses target center by 0.01usft at 11651.15usft MD (11319.00 T D, -710.50 N, 347.50 E)									
- Point									
RS25 166H PBHL_330F	0.00	0.00	11,359.00	-8,150.30	380.60	456,491.01	623,322.05	32° 15' 15.762 N	103° 56' 3.889 W
- plan hits target center									
- Rectangle (sides W100.00 H7,440.00 D0.00)									
RS25 166H LTP_200FS	0.00	0.01	11,359.00	-8,020.30	380.00	456,621.01	623,321.45	32° 15' 17.049 N	103° 56' 3.890 W
- plan misses target center by 0.70usft at 18961.13usft MD (11358.30 T D, -8020.30 N, 380.02 E)									
- Point									

Planning Report

Database:	TP_EDM	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Company:	XTO Energy	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site:	Remuda South 25 State Pad	North Reference:	Grid
Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Wellbore:	166H Lateral		
Design:	Plan #1		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	228.00	228.00	Rustler Anh.			
	304.00	304.00	Base Rustler Anh.			
	325.00	325.00	Salado Sh. Lm.			
	433.00	433.00	Est. Top of Salt			
	3,010.00	3,010.00	Base Salt			
	3,284.00	3,284.00	Lamar Lm. (Del Mtn Grp.)			
	3,306.00	3,306.00	Bell Canyon Ss.			
	4,148.66	4,148.00	Cherry Canyon Ss.			
	5,763.56	5,761.00	Brushy Canyon Ss.			
	6,799.78	6,796.00	Lower Brushy Canyon Ss.			
	7,061.08	7,057.00	Bone Spring Lm.			
	7,158.20	7,154.00	Avalon Ss.			
	7,227.28	7,223.00	Bone Spg. Upper Avalon Lm.			
	7,314.38	7,310.00	Bone Spg. Avalon Sh.			
	7,522.62	7,518.00	Bone Spg. Lower Avalon Lm			
	8,082.28	8,077.00	First Bone Spring Ss.			
	8,396.65	8,391.00	Second Bone Spring Lm.			
	8,908.25	8,902.00	Second Bone Spring Ss.			
	9,213.61	9,207.00	Third Bone Spring Lm.			
	10,001.54	9,994.00	Third Bone Spring Ss.			
	10,313.90	10,306.00	Wolfcamp Sh.			
	10,353.95	10,346.00	Wolfcamp X Ss.			
	10,372.97	10,365.00	LP			
	10,432.04	10,424.00	Wolfcamp Y Ss.			

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 50.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum separation factor of 4.00	Error Surface:	Sperry Type
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 05/22/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,091.13	Plan #1 (166H Lateral)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Remuda North 25 State						
Remuda Basin Unit 1 (Offset) - RBU1 (Offset) - RBU1 (O						Out of range
RN25-105H - 105H Lateral - Plan #1						Out of range
RN25-125H - 125H Lateral - Plan #1						Out of range
RN25-126H - 126H Lateral - Plan #1	10,640.21	11,229.82	250.69	173.89	3.264	CC, ES, SF
RN25-906H - 906H Lateral - Plan #1						Out of range
Remuda South 25 State Pad						
Remuda Basin SWD (Offset) - RB SWD OH - RB SWD O	12,940.00	11,295.09	530.81	258.41	1.949	CC, ES, SF
Remuda Basin Unit 1 (Offset) - RBU1 (Offset) - RBU1 (O						Out of range
RS25-105H - 105H Lateral - Plan #1	3,300.00	3,300.00	59.80	35.64	2.475	CC
RS25-105H - 105H Lateral - Plan #1	3,400.00	3,399.47	60.24	35.37	2.422	ES
RS25-105H - 105H Lateral - Plan #1	3,450.00	3,449.19	61.00	35.76	2.417	SF
RS25-125H - 125H Lateral - Plan #1	3,526.38	3,526.98	28.87	3.55	1.140	Level 2, CC
RS25-125H - 125H Lateral - Plan #1	3,600.00	3,600.74	29.11	3.27	1.126	Level 2, ES, SF
RS25-126H - 126H Lateral - Plan #1	3,300.00	3,300.00	30.00	6.31	1.266	Level 3, CC
RS25-126H - 126H Lateral - Plan #1	3,350.00	3,349.74	30.22	6.18	1.257	Level 3, ES, SF

Offset Design													Remuda North 25 State - RN25-126H - 126H Lateral - Plan #1		Offset Site Error:		0.00 usft	
Survey Program:													0-MWD+IFR1+MS		Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major A is			Distance											
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation						
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor	Warning					
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)							
10,550.00	10,541.82	11,231.85	10,620.84	37.82	39.09	-24.66	-135.56	565.10	266.42	194.06	72.36	3.682						
10,600.00	10,591.76	11,230.72	10,620.85	38.00	39.09	-24.40	-136.69	565.11	253.90	178.27	75.63	3.357						
10,640.21	10,631.93	11,229.82	10,620.85	38.14	39.09	-24.20	-137.59	565.11	250.69	173.89	76.80	3.264	CC, ES, SF					
10,650.00	10,641.70	11,229.60	10,620.85	38.18	39.09	-24.15	-137.81	565.11	250.88	174.05	76.84	3.265						
10,700.00	10,691.64	11,228.47	10,620.85	38.36	39.09	-23.89	-138.94	565.12	257.72	182.15	75.57	3.411						
10,750.00	10,741.59	11,227.34	10,620.86	38.54	39.09	-23.63	-140.06	565.13	273.67	201.17	72.50	3.775						

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - Remuda Basin SWD (Offset) - RB SWD OH - RB SWD OH													Offset Site Error:	0.00 usft
Survey Program: 3138-INC-ONL													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
12,000.00	11,320.87	11,262.81	11,277.80	41.34	228.68	84.81	-2,000.84	-176.37	1,079.04	809.24	269.80	3.999		
12,050.00	11,321.14	11,264.55	11,279.54	41.38	228.73	85.00	-2,000.89	-176.42	1,035.83	765.94	269.88	3.838		
12,100.00	11,321.41	11,266.29	11,281.28	41.42	228.79	85.18	-2,000.94	-176.47	993.24	723.27	269.97	3.679		
12,150.00	11,321.68	11,268.03	11,283.01	41.47	228.85	85.37	-2,000.99	-176.52	951.38	681.32	270.06	3.523		
12,200.00	11,321.95	11,269.76	11,284.75	41.53	228.91	85.56	-2,001.04	-176.57	910.34	640.18	270.16	3.370		
12,250.00	11,322.22	11,271.49	11,286.47	41.60	228.96	85.74	-2,001.09	-176.63	870.23	599.97	270.26	3.220		
12,300.00	11,322.48	11,273.22	11,288.20	41.67	229.02	85.93	-2,001.14	-176.68	831.19	560.82	270.37	3.074		
12,350.00	11,322.75	11,274.94	11,289.92	41.75	229.08	86.11	-2,001.19	-176.73	793.38	522.89	270.49	2.933		
12,400.00	11,323.02	11,276.66	11,291.64	41.84	229.13	86.30	-2,001.24	-176.78	756.98	486.37	270.61	2.797		
12,450.00	11,323.29	11,278.38	11,293.36	41.93	229.19	86.48	-2,001.29	-176.83	722.20	451.46	270.74	2.667		
12,500.00	11,323.56	11,280.10	11,295.08	42.03	229.25	86.67	-2,001.33	-176.88	689.30	418.41	270.89	2.545		
12,550.00	11,323.83	11,281.81	11,296.79	42.14	229.30	86.85	-2,001.38	-176.94	658.54	387.50	271.04	2.430		
12,600.00	11,324.10	11,283.52	11,298.50	42.24	229.36	87.04	-2,001.43	-176.99	630.25	359.05	271.20	2.324		
12,650.00	11,324.37	11,285.23	11,300.21	42.36	229.41	87.22	-2,001.48	-177.04	604.78	333.40	271.37	2.229		
12,700.00	11,324.64	11,286.94	11,301.91	42.48	229.47	87.41	-2,001.53	-177.09	582.48	310.93	271.55	2.145		
12,750.00	11,324.90	11,288.64	11,303.61	42.60	229.53	87.59	-2,001.58	-177.14	563.75	292.01	271.74	2.075		
12,800.00	11,325.17	11,290.34	11,305.31	42.72	229.58	87.77	-2,001.63	-177.19	548.94	277.01	271.92	2.019		
12,850.00	11,325.44	11,292.04	11,307.00	42.85	229.64	87.96	-2,001.68	-177.24	538.37	266.27	272.11	1.979		
12,900.00	11,325.71	11,293.73	11,308.70	42.98	229.69	88.14	-2,001.72	-177.29	532.31	260.04	272.27	1.955		
12,940.00	11,325.93	11,295.09	11,310.05	43.09	229.74	88.29	-2,001.76	-177.33	530.81	258.41	272.39	1.949 CC, ES, SF		
12,950.00	11,325.98	11,295.42	11,310.39	43.12	229.75	88.32	-2,001.77	-177.34	530.90	258.48	272.42	1.949		
13,000.00	11,326.25	11,297.11	11,312.08	43.26	229.81	88.50	-2,001.82	-177.39	534.18	261.64	272.54	1.960		
13,050.00	11,326.52	11,298.80	11,313.76	43.40	229.86	88.69	-2,001.87	-177.44	542.07	269.43	272.64	1.988		
13,100.00	11,326.79	11,300.48	11,315.44	43.54	229.92	88.87	-2,001.92	-177.49	554.37	281.66	272.71	2.033		
13,150.00	11,327.06	11,302.17	11,317.12	43.69	229.97	89.05	-2,001.96	-177.54	570.79	298.04	272.75	2.093		
13,200.00	11,327.32	11,303.84	11,318.80	43.84	230.03	89.23	-2,002.01	-177.59	591.00	318.22	272.78	2.167		
13,250.00	11,327.59	11,305.52	11,320.47	44.00	230.08	89.41	-2,002.06	-177.64	614.61	341.82	272.79	2.253		
13,300.00	11,327.86	11,307.19	11,322.15	44.16	230.14	89.59	-2,002.10	-177.69	641.26	368.47	272.79	2.351		
13,350.00	11,328.13	11,308.86	11,323.82	44.32	230.19	89.77	-2,002.15	-177.74	670.57	397.79	272.78	2.458		
13,400.00	11,328.40	11,310.53	11,325.48	44.48	230.25	89.95	-2,002.20	-177.79	702.22	429.45	272.78	2.574		
13,450.00	11,328.67	11,312.20	11,327.15	44.65	230.30	90.13	-2,002.25	-177.84	735.91	463.14	272.77	2.698		
13,500.00	11,328.94	11,313.86	11,328.81	44.81	230.36	90.31	-2,002.29	-177.89	771.37	498.60	272.77	2.828		
13,550.00	11,329.21	11,315.52	11,330.47	44.99	230.41	90.49	-2,002.34	-177.94	808.36	535.59	272.77	2.963		
13,600.00	11,329.47	11,317.18	11,332.12	45.16	230.47	90.67	-2,002.39	-177.99	846.88	573.90	272.78	3.104		
13,650.00	11,329.74	11,318.83	11,333.77	45.34	230.52	90.85	-2,002.43	-178.04	886.17	613.38	272.79	3.249		
13,700.00	11,330.01	11,320.48	11,335.43	45.52	230.58	91.02	-2,002.48	-178.08	926.67	653.86	272.80	3.397		
13,750.00	11,330.28	11,322.13	11,337.07	45.70	230.63	91.20	-2,002.52	-178.13	968.05	695.23	272.82	3.548		
13,800.00	11,330.55	11,323.78	11,338.72	45.88	230.68	91.38	-2,002.57	-178.18	1,010.21	737.37	272.85	3.702		
13,850.00	11,330.82	11,325.42	11,340.36	46.07	230.74	91.56	-2,002.62	-178.23	1,053.06	780.18	272.87	3.859		

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-105H - 105H Lateral - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
2,050.00	2,050.00	2,050.00	2,050.00	8.05	8.05	-90.00	0.00	-59.80	59.80	44.62	15.18	3.939			
2,100.00	2,100.00	2,100.00	2,100.00	8.23	8.23	-90.00	0.00	-59.80	59.80	44.26	15.54	3.848			
2,150.00	2,150.00	2,150.00	2,150.00	8.41	8.41	-90.00	0.00	-59.80	59.80	43.90	15.90	3.761			
2,200.00	2,200.00	2,200.00	2,200.00	8.60	8.60	-90.00	0.00	-59.80	59.80	43.54	16.26	3.677			
2,250.00	2,250.00	2,250.00	2,250.00	8.78	8.78	-90.00	0.00	-59.80	59.80	43.18	16.62	3.598			
2,300.00	2,300.00	2,300.00	2,300.00	8.96	8.96	-90.00	0.00	-59.80	59.80	42.82	16.98	3.522			
2,350.00	2,350.00	2,350.00	2,350.00	9.14	9.14	-90.00	0.00	-59.80	59.80	42.46	17.34	3.449			
2,400.00	2,400.00	2,400.00	2,400.00	9.32	9.32	-90.00	0.00	-59.80	59.80	42.10	17.70	3.379			
2,450.00	2,450.00	2,450.00	2,450.00	9.50	9.50	-90.00	0.00	-59.80	59.80	41.74	18.06	3.311			
2,500.00	2,500.00	2,500.00	2,500.00	9.68	9.68	-90.00	0.00	-59.80	59.80	41.38	18.42	3.247			
2,550.00	2,550.00	2,550.00	2,550.00	9.86	9.86	-90.00	0.00	-59.80	59.80	41.02	18.78	3.185			
2,600.00	2,600.00	2,600.00	2,600.00	10.04	10.04	-90.00	0.00	-59.80	59.80	40.66	19.14	3.125			
2,650.00	2,650.00	2,650.00	2,650.00	10.22	10.22	-90.00	0.00	-59.80	59.80	40.30	19.50	3.067			
2,700.00	2,700.00	2,700.00	2,700.00	10.40	10.40	-90.00	0.00	-59.80	59.80	39.95	19.85	3.012			
2,750.00	2,750.00	2,750.00	2,750.00	10.58	10.58	-90.00	0.00	-59.80	59.80	39.59	20.21	2.958			
2,800.00	2,800.00	2,800.00	2,800.00	10.76	10.76	-90.00	0.00	-59.80	59.80	39.23	20.57	2.907			
2,850.00	2,850.00	2,850.00	2,850.00	10.94	10.94	-90.00	0.00	-59.80	59.80	38.87	20.93	2.857			
2,900.00	2,900.00	2,900.00	2,900.00	11.12	11.12	-90.00	0.00	-59.80	59.80	38.51	21.29	2.809			
2,950.00	2,950.00	2,950.00	2,950.00	11.30	11.30	-90.00	0.00	-59.80	59.80	38.15	21.65	2.762			
3,000.00	3,000.00	3,000.00	3,000.00	11.48	11.48	-90.00	0.00	-59.80	59.80	37.79	22.01	2.717			
3,050.00	3,050.00	3,050.00	3,050.00	11.66	11.66	-90.00	0.00	-59.80	59.80	37.43	22.37	2.673			
3,100.00	3,100.00	3,100.00	3,100.00	11.84	11.84	-90.00	0.00	-59.80	59.80	37.07	22.73	2.631			
3,150.00	3,150.00	3,150.00	3,150.00	12.02	12.02	-90.00	0.00	-59.80	59.80	36.71	23.09	2.590			
3,200.00	3,200.00	3,200.00	3,200.00	12.20	12.20	-90.00	0.00	-59.80	59.80	36.35	23.45	2.551			
3,250.00	3,250.00	3,250.00	3,250.00	12.38	12.38	-90.00	0.00	-59.80	59.80	36.00	23.80	2.512			
3,300.00	3,300.00	3,300.00	3,300.00	12.56	12.56	-90.00	0.00	-59.80	59.80	35.64	24.16	2.475 CC			
3,350.00	3,350.00	3,349.74	3,349.74	12.74	12.72	-90.18	-0.19	-59.91	59.91	35.40	24.51	2.444			
3,400.00	3,400.00	3,399.47	3,399.47	12.92	12.88	-90.71	-0.75	-60.23	60.24	35.37	24.87	2.422 ES			
3,450.00	3,450.00	3,449.19	3,449.17	13.09	13.04	154.64	-1.68	-60.77	61.00	35.76	25.24	2.417 SF			
3,500.00	3,500.00	3,498.87	3,498.83	13.25	13.20	153.71	-2.99	-61.53	62.39	36.79	25.60	2.437			
3,550.00	3,549.98	3,548.52	3,548.44	13.41	13.36	152.67	-4.67	-62.49	64.43	38.46	25.96	2.481			
3,600.00	3,599.96	3,598.11	3,597.98	13.56	13.52	151.56	-6.71	-63.68	67.11	40.79	26.32	2.549			
3,650.00	3,649.92	3,647.64	3,647.43	13.72	13.68	150.43	-9.13	-65.07	70.44	43.76	26.68	2.640			
3,700.00	3,699.87	3,697.09	3,696.78	13.88	13.85	149.29	-11.91	-66.68	74.40	47.36	27.04	2.752			
3,750.00	3,749.81	3,746.48	3,746.03	14.04	14.01	148.06	-15.06	-68.49	78.70	51.31	27.39	2.873			
3,800.00	3,799.75	3,795.80	3,795.18	14.20	14.17	146.72	-18.57	-70.52	83.31	55.56	27.75	3.002			
3,850.00	3,849.69	3,845.03	3,844.21	14.36	14.33	145.32	-22.43	-72.75	88.24	60.13	28.11	3.140			
3,900.00	3,899.63	3,894.18	3,893.12	14.52	14.49	143.88	-26.66	-75.19	93.50	65.04	28.46	3.286			
3,950.00	3,949.57	3,943.76	3,942.43	14.68	14.66	142.46	-31.14	-77.78	98.99	70.18	28.82	3.435			
4,000.00	3,999.51	3,993.40	3,991.79	14.84	14.82	141.20	-35.64	-80.38	104.55	75.37	29.18	3.583			
4,050.00	4,049.45	4,043.04	4,041.16	15.01	14.99	140.06	-40.13	-82.97	110.14	80.61	29.54	3.729			
4,100.00	4,099.40	4,092.68	4,090.53	15.17	15.15	139.03	-44.62	-85.56	115.78	85.89	29.89	3.874			

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-125H - 125H Lateral - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major A is	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,050.00	1,050.00	1,050.00	1,050.00	4.40	3.55	-90.00	-90.00	0.00	-30.00	30.00	22.47	7.53	3.985	
1,100.00	1,100.00	1,100.00	1,100.00	4.58	3.72	-90.00	-90.00	0.00	-30.00	30.00	22.11	7.89	3.803	
1,116.67	1,116.67	1,116.67	1,116.67	4.65	3.78	-90.00	-90.00	0.00	-30.00	30.00	21.99	8.01	3.746	
1,150.00	1,150.00	1,150.00	1,150.00	4.77	3.90	-90.00	-90.00	0.00	-30.00	30.00	21.75	8.25	3.637	
1,200.00	1,200.00	1,200.00	1,200.00	4.95	4.08	-90.00	-90.00	0.00	-30.00	30.00	21.39	8.61	3.484	
1,250.00	1,250.00	1,250.00	1,250.00	5.14	4.26	-90.00	-90.00	0.00	-30.00	30.00	21.03	8.97	3.345	
1,300.00	1,300.00	1,300.00	1,300.00	5.32	4.44	-90.00	-90.00	0.00	-30.00	30.00	20.67	9.33	3.215	
1,350.00	1,350.00	1,350.00	1,350.00	5.50	4.62	-90.00	-90.00	0.00	-30.00	30.00	20.31	9.69	3.096	
1,400.00	1,400.00	1,400.00	1,400.00	5.69	4.80	-90.00	-90.00	0.00	-30.00	30.00	19.95	10.05	2.985	
1,450.00	1,450.00	1,450.00	1,450.00	5.87	4.98	-90.00	-90.00	0.00	-30.00	30.00	19.59	10.41	2.882	
1,500.00	1,500.00	1,500.00	1,500.00	6.05	5.16	-90.00	-90.00	0.00	-30.00	30.00	19.23	10.77	2.786	
1,550.00	1,550.00	1,550.00	1,550.00	6.24	5.34	-90.00	-90.00	0.00	-30.00	30.00	18.87	11.13	2.696	
1,600.00	1,600.00	1,600.00	1,600.00	6.42	5.52	-90.00	-90.00	0.00	-30.00	30.00	18.51	11.49	2.611	
1,650.00	1,650.00	1,650.00	1,650.00	6.60	5.70	-90.00	-90.00	0.00	-30.00	30.00	18.15	11.85	2.532	
1,700.00	1,700.00	1,700.00	1,700.00	6.78	5.88	-90.00	-90.00	0.00	-30.00	30.00	17.79	12.21	2.458	
1,716.67	1,716.67	1,716.67	1,716.67	6.84	5.94	-90.00	-90.00	0.00	-30.00	30.00	17.67	12.33	2.434	
1,750.00	1,750.00	1,750.00	1,750.00	6.96	6.05	-90.00	-90.00	0.00	-30.00	30.00	17.43	12.57	2.387	
1,800.00	1,800.00	1,800.00	1,800.00	7.15	6.23	-90.00	-90.00	0.00	-30.00	30.00	17.07	12.93	2.321	
1,850.00	1,850.00	1,850.00	1,850.00	7.33	6.41	-90.00	-90.00	0.00	-30.00	30.00	16.72	13.28	2.258	
1,900.00	1,900.00	1,900.00	1,900.00	7.51	6.59	-90.00	-90.00	0.00	-30.00	30.00	16.36	13.64	2.199	
1,950.00	1,950.00	1,950.00	1,950.00	7.69	6.77	-90.00	-90.00	0.00	-30.00	30.00	16.00	14.00	2.142	
2,000.00	2,000.00	2,000.00	2,000.00	7.87	6.95	-90.00	-90.00	0.00	-30.00	30.00	15.64	14.36	2.089	
2,050.00	2,050.00	2,050.00	2,050.00	8.05	7.13	-90.00	-90.00	0.00	-30.00	30.00	15.28	14.72	2.038	
2,100.00	2,100.00	2,100.00	2,100.00	8.23	7.31	-90.00	-90.00	0.00	-30.00	30.00	14.92	15.08	1.989	
2,150.00	2,150.00	2,150.00	2,150.00	8.41	7.49	-90.00	-90.00	0.00	-30.00	30.00	14.56	15.44	1.943	
2,200.00	2,200.00	2,200.00	2,200.00	8.60	7.67	-90.00	-90.00	0.00	-30.00	30.00	14.20	15.80	1.899	
2,250.00	2,250.00	2,250.00	2,250.00	8.78	7.85	-90.00	-90.00	0.00	-30.00	30.00	13.84	16.16	1.857	
2,300.00	2,300.00	2,300.00	2,300.00	8.96	8.03	-90.00	-90.00	0.00	-30.00	30.00	13.48	16.52	1.816	
2,350.00	2,350.00	2,350.00	2,350.00	9.14	8.21	-90.00	-90.00	0.00	-30.00	30.00	13.12	16.88	1.778	
2,400.00	2,400.00	2,400.00	2,400.00	9.32	8.38	-90.00	-90.00	0.00	-30.00	30.00	12.77	17.23	1.741	
2,450.00	2,450.00	2,450.00	2,450.00	9.50	8.56	-90.00	-90.00	0.00	-30.00	30.00	12.41	17.59	1.705	
2,500.00	2,500.00	2,500.00	2,500.00	9.68	8.74	-90.00	-90.00	0.00	-30.00	30.00	12.05	17.95	1.671	
2,550.00	2,550.00	2,550.00	2,550.00	9.86	8.92	-90.00	-90.00	0.00	-30.00	30.00	11.69	18.31	1.638	
2,600.00	2,600.00	2,600.00	2,600.00	10.04	9.10	-90.00	-90.00	0.00	-30.00	30.00	11.33	18.67	1.607	
2,650.00	2,650.00	2,650.00	2,650.00	10.22	9.28	-90.00	-90.00	0.00	-30.00	30.00	10.97	19.03	1.577	
2,700.00	2,700.00	2,700.00	2,700.00	10.40	9.46	-90.00	-90.00	0.00	-30.00	30.00	10.61	19.39	1.547	
2,750.00	2,750.00	2,750.00	2,750.00	10.58	9.64	-90.00	-90.00	0.00	-30.00	30.00	10.25	19.75	1.519	
2,800.00	2,800.00	2,800.00	2,800.00	10.76	9.82	-90.00	-90.00	0.00	-30.00	30.00	9.89	20.11	1.492 Level 3	
2,850.00	2,850.00	2,850.00	2,850.00	10.94	10.00	-90.00	-90.00	0.00	-30.00	30.00	9.54	20.46	1.466 Level 3	
2,900.00	2,900.00	2,900.00	2,900.00	11.12	10.18	-90.00	-90.00	0.00	-30.00	30.00	9.18	20.82	1.441 Level 3	
2,950.00	2,950.00	2,950.00	2,950.00	11.30	10.36	-90.00	-90.00	0.00	-30.00	30.00	8.82	21.18	1.416 Level 3	
3,000.00	3,000.00	3,000.00	3,000.00	11.48	10.54	-90.00	-90.00	0.00	-30.00	30.00	8.46	21.54	1.393 Level 3	
3,050.00	3,050.00	3,050.00	3,050.00	11.66	10.71	-90.00	-90.00	0.00	-30.00	30.00	8.10	21.90	1.370 Level 3	
3,100.00	3,100.00	3,100.00	3,100.00	11.84	10.89	-90.00	-90.00	0.00	-30.00	30.00	7.74	22.26	1.348 Level 3	
3,150.00	3,150.00	3,150.00	3,150.00	12.02	11.07	-90.00	-90.00	0.00	-30.00	30.00	7.38	22.62	1.326 Level 3	
3,200.00	3,200.00	3,200.00	3,200.00	12.20	11.25	-90.00	-90.00	0.00	-30.00	30.00	7.02	22.98	1.306 Level 3	
3,250.00	3,250.00	3,250.00	3,250.00	12.38	11.43	-90.00	-90.00	0.00	-30.00	30.00	6.67	23.33	1.286 Level 3	
3,300.00	3,300.00	3,300.00	3,300.00	12.56	11.61	-90.00	-90.00	0.00	-30.00	30.00	6.31	23.69	1.266 Level 3	
3,350.00	3,350.00	3,350.15	3,350.15	12.74	11.78	-90.34	-90.34	-0.18	-29.87	29.88	5.83	24.05	1.242 Level 2	
3,400.00	3,400.00	3,400.29	3,400.29	12.92	11.95	-91.40	-91.40	-0.72	-29.50	29.51	5.09	24.41	1.209 Level 2	
3,450.00	3,450.00	3,450.42	3,450.40	13.09	12.12	153.13	153.13	-1.62	-28.87	29.11	4.34	24.77	1.175 Level 2	
3,500.00	3,500.00	3,500.54	3,500.50	13.25	12.28	151.14	151.14	-2.87	-27.99	28.90	3.77	25.13	1.150 Level 2	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-125H - 125H Lateral - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
3,526.38	3,526.37	3,526.98	3,526.92	13.33	12.37	149.94	-3.68	-27.42	28.87	3.55	25.32	1.140	Level 2, CC		
3,550.00	3,549.98	3,550.65	3,550.57	13.41	12.45	148.80	-4.49	-26.86	28.89	3.41	25.49	1.134	Level 2		
3,600.00	3,599.96	3,600.74	3,600.61	13.56	12.61	146.15	-6.46	-25.47	29.11	3.27	25.85	1.126	Level 2, ES, SF		
3,650.00	3,649.92	3,650.82	3,650.60	13.72	12.78	143.27	-8.80	-23.84	29.58	3.37	26.21	1.129	Level 2		
3,700.00	3,699.87	3,700.88	3,700.56	13.88	12.94	140.18	-11.48	-21.96	30.28	3.70	26.58	1.139	Level 2		
3,750.00	3,749.81	3,750.92	3,750.46	14.04	13.11	136.55	-14.53	-19.83	30.99	4.03	26.95	1.150	Level 2		
3,800.00	3,799.75	3,800.93	3,800.29	14.20	13.27	132.33	-17.93	-17.45	31.73	4.39	27.33	1.161	Level 2		
3,850.00	3,849.69	3,850.89	3,850.04	14.36	13.44	127.56	-21.68	-14.82	32.58	4.87	27.71	1.176	Level 2		
3,900.00	3,899.63	3,900.81	3,899.71	14.52	13.61	122.33	-25.78	-11.95	33.63	5.55	28.08	1.198	Level 2		
3,950.00	3,949.57	3,950.69	3,949.32	14.68	13.77	117.11	-30.05	-8.96	34.96	6.53	28.43	1.230	Level 2		
4,000.00	3,999.51	4,000.57	3,998.93	14.84	13.94	112.31	-34.32	-5.97	36.56	7.80	28.77	1.271	Level 3		
4,050.00	4,049.45	4,050.46	4,048.54	15.01	14.11	107.94	-38.59	-2.98	38.39	9.30	29.09	1.320	Level 3		
4,100.00	4,099.40	4,100.34	4,098.15	15.17	14.27	103.99	-42.87	0.01	40.43	11.02	29.41	1.375	Level 3		
4,150.00	4,149.34	4,150.23	4,147.76	15.33	14.44	100.43	-47.14	3.01	42.64	12.92	29.72	1.435	Level 3		
4,200.00	4,199.28	4,200.11	4,197.37	15.50	14.61	97.23	-51.41	6.00	45.00	14.96	30.04	1.498	Level 3		
4,250.00	4,249.22	4,250.00	4,246.98	15.66	14.78	94.36	-55.68	8.99	47.48	17.13	30.36	1.564			
4,300.00	4,299.16	4,299.88	4,296.59	15.83	14.95	91.78	-59.95	11.98	50.08	19.40	30.67	1.633			
4,350.00	4,349.10	4,349.77	4,346.21	15.99	15.12	89.45	-64.22	14.97	52.76	21.77	30.99	1.702			
4,400.00	4,399.04	4,399.65	4,395.82	16.16	15.29	87.35	-68.49	17.96	55.52	24.21	31.31	1.773			
4,450.00	4,448.98	4,449.53	4,445.43	16.32	15.46	85.46	-72.76	20.95	58.35	26.71	31.64	1.844			
4,500.00	4,498.93	4,499.42	4,495.04	16.49	15.63	83.74	-77.04	23.94	61.24	29.27	31.96	1.916			
4,550.00	4,548.87	4,549.30	4,544.65	16.66	15.80	82.18	-81.31	26.93	64.17	31.88	32.29	1.987			
4,600.00	4,598.81	4,599.19	4,594.26	16.83	15.97	80.75	-85.58	29.92	67.15	34.53	32.62	2.059			
4,650.00	4,648.75	4,649.07	4,643.87	16.99	16.14	79.45	-89.85	32.91	70.17	37.22	32.95	2.129			
4,700.00	4,698.69	4,698.96	4,693.48	17.16	16.31	78.25	-94.12	35.90	73.22	39.94	33.29	2.200			
4,750.00	4,748.63	4,748.84	4,743.10	17.33	16.48	77.15	-98.39	38.90	76.30	42.68	33.62	2.269			
4,800.00	4,798.57	4,798.73	4,792.71	17.50	16.65	76.14	-102.66	41.89	79.41	45.45	33.96	2.338			
4,850.00	4,848.51	4,848.61	4,842.32	17.67	16.83	75.20	-106.94	44.88	82.54	48.24	34.30	2.407			
4,900.00	4,898.46	4,898.49	4,891.93	17.84	17.00	74.33	-111.21	47.87	85.69	51.06	34.64	2.474			
4,950.00	4,948.40	4,948.38	4,941.54	18.01	17.17	73.52	-115.48	50.86	88.86	53.88	34.98	2.541			
5,000.00	4,998.34	4,998.26	4,991.15	18.18	17.34	72.77	-119.75	53.85	92.04	56.73	35.32	2.606			
5,050.00	5,048.28	5,048.15	5,040.76	18.35	17.52	72.07	-124.02	56.84	95.24	59.58	35.66	2.671			
5,100.00	5,098.22	5,098.03	5,090.37	18.52	17.69	71.41	-128.29	59.83	98.45	62.45	36.00	2.735			
5,150.00	5,148.16	5,147.92	5,139.98	18.69	17.86	70.80	-132.56	62.82	101.68	65.33	36.35	2.798			
5,200.00	5,198.10	5,197.80	5,189.60	18.86	18.04	70.22	-136.83	65.81	104.91	68.22	36.69	2.859			
5,250.00	5,248.04	5,248.40	5,239.94	19.03	18.21	69.74	-141.00	68.73	108.00	70.95	37.06	2.915			
5,300.00	5,297.99	5,299.08	5,290.40	19.20	18.39	69.43	-144.81	71.40	110.75	73.33	37.42	2.959			
5,350.00	5,347.93	5,349.80	5,340.95	19.37	18.57	69.27	-148.25	73.81	113.16	75.36	37.79	2.994			
5,400.00	5,397.87	5,400.55	5,391.56	19.55	18.74	69.26	-151.33	75.96	115.21	77.06	38.16	3.019			
5,450.00	5,447.81	5,451.33	5,442.23	19.72	18.92	69.39	-154.05	77.86	116.92	78.40	38.52	3.035			
5,500.00	5,497.75	5,502.12	5,492.94	19.89	19.10	69.64	-156.39	79.51	118.29	79.40	38.89	3.042			
5,550.00	5,547.69	5,552.93	5,543.69	20.06	19.27	70.03	-158.37	80.89	119.31	80.06	39.25	3.040			
5,600.00	5,597.63	5,603.74	5,594.46	20.24	19.45	70.54	-159.98	82.02	119.99	80.38	39.61	3.029			
5,650.00	5,647.58	5,654.54	5,645.24	20.41	19.63	71.19	-161.22	82.89	120.34	80.37	39.97	3.011			
5,700.00	5,697.52	5,705.32	5,696.01	20.58	19.80	71.98	-162.09	83.50	120.37	80.05	40.33	2.985			
5,750.00	5,747.46	5,756.08	5,746.77	20.76	19.98	72.90	-162.60	83.85	120.10	79.41	40.68	2.952			
5,800.00	5,797.40	5,806.71	5,797.40	20.93	20.16	73.97	-162.73	83.95	119.53	78.49	41.04	2.913			
5,850.00	5,847.34	5,856.65	5,847.34	21.10	20.33	75.09	-162.73	83.95	118.88	77.49	41.39	2.872			
5,900.00	5,897.28	5,906.59	5,897.28	21.28	20.50	76.22	-162.73	83.95	118.28	76.53	41.75	2.833			
5,950.00	5,947.22	5,956.54	5,947.22	21.45	20.68	77.37	-162.73	83.95	117.73	75.62	42.10	2.796			
6,000.00	5,997.16	6,006.48	5,997.16	21.63	20.85	78.52	-162.73	83.95	117.22	74.76	42.46	2.761			
6,050.00	6,047.11	6,056.42	6,047.11	21.80	21.03	79.69	-162.73	83.95	116.76	73.95	42.81	2.727			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-125H - 125H Lateral - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
6,100.00	6,097.05	6,106.36	6,097.05	21.98	21.21	80.86	-162.73	83.95	116.35	73.18	43.17	2.695			
6,150.00	6,146.99	6,156.30	6,146.99	22.15	21.38	82.04	-162.73	83.95	115.99	72.47	43.52	2.665			
6,200.00	6,196.93	6,206.24	6,196.93	22.33	21.56	83.23	-162.73	83.95	115.68	71.80	43.87	2.637			
6,250.00	6,246.87	6,256.18	6,246.87	22.50	21.73	84.42	-162.73	83.95	115.42	71.19	44.23	2.610			
6,300.00	6,296.81	6,306.13	6,296.81	22.68	21.91	85.62	-162.73	83.95	115.21	70.63	44.58	2.584			
6,350.00	6,346.75	6,356.07	6,346.75	22.85	22.08	86.82	-162.73	83.95	115.05	70.12	44.93	2.561			
6,400.00	6,396.69	6,406.01	6,396.69	23.03	22.26	88.02	-162.73	83.95	114.94	69.66	45.28	2.538			
6,450.00	6,446.64	6,455.95	6,446.64	23.20	22.44	89.23	-162.73	83.95	114.88	69.25	45.63	2.518			
6,481.96	6,478.56	6,487.87	6,478.56	23.32	22.55	90.00	-162.73	83.95	114.87	69.01	45.86	2.505			
6,500.00	6,496.58	6,505.89	6,496.58	23.38	22.61	90.44	-162.73	83.95	114.87	68.89	45.98	2.498			
6,550.00	6,546.52	6,555.83	6,546.52	23.56	22.79	91.64	-162.73	83.95	114.92	68.59	46.33	2.480			
6,600.00	6,596.46	6,605.77	6,596.46	23.73	22.96	92.85	-162.73	83.95	115.01	68.33	46.68	2.464			
6,650.00	6,646.40	6,655.71	6,646.40	23.91	23.14	94.05	-162.73	83.95	115.16	68.13	47.03	2.449			
6,700.00	6,696.34	6,705.66	6,696.34	24.08	23.32	95.25	-162.73	83.95	115.35	67.98	47.38	2.435			
6,750.00	6,746.28	6,755.60	6,746.28	24.26	23.49	96.44	-162.73	83.95	115.60	67.88	47.72	2.422			
6,800.00	6,796.22	6,805.54	6,796.22	24.44	23.67	97.63	-162.73	83.95	115.90	67.83	48.07	2.411			
6,850.00	6,846.17	6,855.48	6,846.17	24.61	23.84	98.81	-162.73	83.95	116.25	67.83	48.42	2.401			
6,900.00	6,896.11	6,905.42	6,896.11	24.79	24.02	99.99	-162.73	83.95	116.64	67.88	48.76	2.392			
6,950.00	6,946.05	6,955.36	6,946.05	24.97	24.20	101.15	-162.73	83.95	117.09	67.98	49.11	2.384			
7,000.00	6,995.99	7,005.30	6,995.99	25.14	24.37	102.31	-162.73	83.95	117.58	68.13	49.45	2.378			
7,050.00	7,045.93	7,055.24	7,045.93	25.32	24.55	103.46	-162.73	83.95	118.12	68.32	49.80	2.372			
7,100.00	7,095.87	7,105.19	7,095.87	25.50	24.73	104.59	-162.73	83.95	118.71	68.57	50.14	2.367			
7,150.00	7,145.81	7,155.13	7,145.81	25.68	24.90	105.72	-162.73	83.95	119.34	68.86	50.49	2.364			
7,200.00	7,195.75	7,205.07	7,195.75	25.85	25.08	106.83	-162.73	83.95	120.02	69.19	50.83	2.361			
7,250.00	7,245.70	7,255.01	7,245.70	26.03	25.26	107.93	-162.73	83.95	120.75	69.57	51.18	2.359			
7,300.00	7,295.64	7,304.95	7,295.64	26.21	25.43	109.02	-162.73	83.95	121.52	70.00	51.52	2.359			
7,350.00	7,345.58	7,354.89	7,345.58	26.39	25.61	110.09	-162.73	83.95	122.33	70.46	51.86	2.359			
7,400.00	7,395.52	7,404.83	7,395.52	26.56	25.79	111.14	-162.73	83.95	123.18	70.97	52.21	2.359			
7,450.00	7,445.46	7,454.77	7,445.46	26.74	25.96	112.19	-162.73	83.95	124.08	71.53	52.55	2.361			
7,500.00	7,495.40	7,504.72	7,495.40	26.92	26.14	113.21	-162.73	83.95	125.01	72.12	52.89	2.363			
7,550.00	7,545.34	7,554.66	7,545.34	27.10	26.32	114.23	-162.73	83.95	125.99	72.75	53.24	2.366			
7,600.00	7,595.28	7,604.60	7,595.28	27.27	26.49	115.22	-162.73	83.95	127.00	73.42	53.58	2.370			
7,650.00	7,645.23	7,654.54	7,645.23	27.45	26.67	116.20	-162.73	83.95	128.05	74.13	53.93	2.375			
7,700.00	7,695.17	7,704.48	7,695.17	27.63	26.85	117.16	-162.73	83.95	129.14	74.87	54.27	2.380			
7,750.00	7,745.11	7,754.42	7,745.11	27.81	27.02	118.11	-162.73	83.95	130.27	75.65	54.62	2.385			
7,800.00	7,795.05	7,804.36	7,795.05	27.99	27.20	119.04	-162.73	83.95	131.43	76.47	54.96	2.391			
7,850.00	7,844.99	7,854.30	7,844.99	28.16	27.38	119.96	-162.73	83.95	132.62	77.32	55.31	2.398			
7,900.00	7,894.93	7,904.25	7,894.93	28.34	27.56	120.85	-162.73	83.95	133.85	78.20	55.65	2.405			
7,950.00	7,944.87	7,954.19	7,944.87	28.52	27.73	121.74	-162.73	83.95	135.11	79.11	56.00	2.413			
8,000.00	7,994.82	8,004.13	7,994.82	28.70	27.91	122.60	-162.73	83.95	136.40	80.06	56.34	2.421			
8,050.00	8,044.76	8,054.07	8,044.76	28.88	28.09	123.45	-162.73	83.95	137.72	81.03	56.69	2.430			
8,100.00	8,094.70	8,104.01	8,094.70	29.05	28.26	124.28	-162.73	83.95	139.07	82.04	57.03	2.438			
8,150.00	8,144.64	8,153.95	8,144.64	29.23	28.44	125.10	-162.73	83.95	140.45	83.07	57.38	2.448			
8,200.00	8,194.58	8,203.89	8,194.58	29.41	28.62	125.90	-162.73	83.95	141.86	84.13	57.73	2.458			
8,250.00	8,244.52	8,253.84	8,244.52	29.59	28.80	126.68	-162.73	83.95	143.29	85.22	58.07	2.468			
8,300.00	8,294.46	8,303.78	8,294.46	29.77	28.97	127.45	-162.73	83.95	144.76	86.34	58.42	2.478			
8,350.00	8,344.40	8,353.72	8,344.40	29.95	29.15	128.20	-162.73	83.95	146.24	87.48	58.77	2.489			
8,400.00	8,394.35	8,403.66	8,394.35	30.13	29.33	128.94	-162.73	83.95	147.75	88.64	59.11	2.500			
8,450.00	8,444.29	8,453.60	8,444.29	30.30	29.50	129.66	-162.73	83.95	149.29	89.83	59.46	2.511			
8,500.00	8,494.23	8,503.54	8,494.23	30.48	29.68	130.37	-162.73	83.95	150.85	91.04	59.81	2.522			
8,550.00	8,544.17	8,553.48	8,544.17	30.66	29.86	131.06	-162.73	83.95	152.43	92.27	60.16	2.534			
8,600.00	8,594.11	8,603.42	8,594.11	30.84	30.04	131.74	-162.73	83.95	154.03	93.53	60.51	2.546			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-125H - 125H Lateral - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is			Distance						Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
8,650.00	8,644.05	8,653.37	8,644.05	31.02	30.21	132.41	-162.73	83.95	155.66	94.80	60.85	2.558			
8,700.00	8,693.99	8,703.31	8,693.99	31.20	30.39	133.06	-162.73	83.95	157.30	96.10	61.20	2.570			
8,750.00	8,743.93	8,753.25	8,743.93	31.38	30.57	133.70	-162.73	83.95	158.97	97.42	61.55	2.583			
8,800.00	8,793.88	8,803.19	8,793.88	31.55	30.75	134.32	-162.73	83.95	160.65	98.75	61.90	2.595			
8,850.00	8,843.82	8,853.13	8,843.82	31.73	30.92	134.93	-162.73	83.95	162.35	100.10	62.25	2.608			
8,900.00	8,893.76	8,903.07	8,893.76	31.91	31.10	135.53	-162.73	83.95	164.08	101.47	62.60	2.621			
8,950.00	8,943.70	8,953.01	8,943.70	32.09	31.28	136.12	-162.73	83.95	165.81	102.86	62.95	2.634			
9,000.00	8,993.64	9,002.95	8,993.64	32.27	31.46	136.69	-162.73	83.95	167.57	104.27	63.30	2.647			
9,050.00	9,043.58	9,052.90	9,043.58	32.45	31.63	137.25	-162.73	83.95	169.34	105.69	63.65	2.660			
9,100.00	9,093.52	9,102.84	9,093.52	32.63	31.81	137.80	-162.73	83.95	171.13	107.13	64.00	2.674			
9,150.00	9,143.46	9,152.78	9,143.46	32.81	31.99	138.34	-162.73	83.95	172.93	108.58	64.36	2.687			
9,200.00	9,193.41	9,202.72	9,193.41	32.98	32.17	138.87	-162.73	83.95	174.75	110.04	64.71	2.701			
9,250.00	9,243.35	9,252.66	9,243.35	33.16	32.34	139.39	-162.73	83.95	176.58	111.53	65.06	2.714			
9,300.00	9,293.29	9,302.60	9,293.29	33.34	32.52	139.89	-162.73	83.95	178.43	113.02	65.41	2.728			
9,350.00	9,343.23	9,352.54	9,343.23	33.52	32.70	140.39	-162.73	83.95	180.29	114.53	65.76	2.742			
9,400.00	9,393.17	9,402.48	9,393.17	33.70	32.88	140.87	-162.73	83.95	182.17	116.05	66.11	2.755			
9,450.00	9,443.11	9,452.43	9,443.11	33.88	33.05	141.35	-162.73	83.95	184.05	117.59	66.47	2.769			
9,500.00	9,493.05	9,502.37	9,493.05	34.06	33.23	141.82	-162.73	83.95	185.95	119.13	66.82	2.783			
9,550.00	9,542.99	9,552.31	9,542.99	34.24	33.41	142.27	-162.73	83.95	187.86	120.69	67.17	2.797			
9,600.00	9,592.94	9,602.25	9,592.94	34.42	33.59	142.72	-162.73	83.95	189.78	122.26	67.52	2.811			
9,650.00	9,642.88	9,652.19	9,642.88	34.60	33.76	143.16	-162.73	83.95	191.72	123.84	67.88	2.825			
9,700.00	9,692.82	9,702.13	9,692.82	34.77	33.94	143.59	-162.73	83.95	193.66	125.43	68.23	2.838			
9,750.00	9,742.76	9,752.07	9,742.76	34.95	34.12	144.01	-162.73	83.95	195.62	127.04	68.58	2.852			
9,800.00	9,792.70	9,802.01	9,792.70	35.13	34.30	144.42	-162.73	83.95	197.59	128.65	68.94	2.866			
9,850.00	9,842.64	9,851.96	9,842.64	35.31	34.48	144.83	-162.73	83.95	199.56	130.27	69.29	2.880			
9,900.00	9,892.58	9,901.90	9,892.58	35.49	34.65	145.22	-162.73	83.95	201.55	131.90	69.64	2.894			
9,950.00	9,942.52	9,951.84	9,942.52	35.67	34.83	145.61	-162.73	83.95	203.54	133.54	70.00	2.908			
10,000.00	9,992.47	10,001.78	9,992.47	35.85	35.01	145.99	-162.73	83.95	205.55	135.20	70.35	2.922			
10,050.00	10,042.41	10,051.72	10,042.41	36.03	35.18	146.37	-162.73	83.95	207.56	136.86	70.70	2.936			
10,100.00	10,092.35	10,100.00	10,090.66	36.21	35.35	146.37	-164.03	83.86	209.89	138.86	71.03	2.955			
10,150.00	10,142.29	10,144.09	10,134.49	36.39	35.49	145.47	-168.68	83.53	213.18	141.89	71.29	2.990			
10,200.00	10,192.23	10,188.81	10,178.44	36.57	35.64	143.70	-176.82	82.96	217.62	146.11	71.51	3.043			
10,250.00	10,242.17	10,232.11	10,220.28	36.75	35.78	141.25	-187.93	82.19	223.53	151.91	71.62	3.121			
10,300.00	10,292.11	10,273.60	10,259.47	36.92	35.92	138.31	-201.50	81.24	231.31	159.73	71.59	3.231			
10,350.00	10,342.06	10,312.99	10,295.66	37.10	36.04	135.08	-216.98	80.15	241.36	170.02	71.34	3.383			
10,400.00	10,392.00	10,350.00	10,328.63	37.28	36.15	131.77	-233.74	78.98	254.00	183.16	70.83	3.586			
10,450.00	10,441.94	10,384.80	10,358.58	37.46	36.25	128.49	-251.42	77.75	269.45	199.36	70.09	3.844			

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design													Offset Site Error:	0.00 usft
Remuda South 25 State Pad - RS25-126H - 126H Lateral - Plan #1													Offset Well Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														
Reference		Offset		Semi Major A is		Highside		Offset Wellbore Centre		Distance		Minimum		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
1,050.00	1,050.00	1,050.00	1,050.00	4.40	3.55	90.19		-0.10	30.00	30.00	22.47	7.53	3.986	
1,100.00	1,100.00	1,100.00	1,100.00	4.58	3.72	90.19		-0.10	30.00	30.00	22.11	7.89	3.804	
1,116.67	1,116.67	1,116.67	1,116.67	4.65	3.78	90.19		-0.10	30.00	30.00	21.99	8.01	3.747	
1,150.00	1,150.00	1,150.00	1,150.00	4.77	3.90	90.19		-0.10	30.00	30.00	21.75	8.25	3.638	
1,200.00	1,200.00	1,200.00	1,200.00	4.95	4.08	90.19		-0.10	30.00	30.00	21.39	8.61	3.486	
1,250.00	1,250.00	1,250.00	1,250.00	5.14	4.26	90.19		-0.10	30.00	30.00	21.03	8.97	3.346	
1,300.00	1,300.00	1,300.00	1,300.00	5.32	4.44	90.19		-0.10	30.00	30.00	20.67	9.33	3.217	
1,350.00	1,350.00	1,350.00	1,350.00	5.50	4.62	90.19		-0.10	30.00	30.00	20.31	9.69	3.097	
1,400.00	1,400.00	1,400.00	1,400.00	5.69	4.80	90.19		-0.10	30.00	30.00	19.95	10.05	2.986	
1,450.00	1,450.00	1,450.00	1,450.00	5.87	4.98	90.19		-0.10	30.00	30.00	19.59	10.41	2.883	
1,500.00	1,500.00	1,500.00	1,500.00	6.05	5.16	90.19		-0.10	30.00	30.00	19.23	10.77	2.787	
1,550.00	1,550.00	1,550.00	1,550.00	6.24	5.34	90.19		-0.10	30.00	30.00	18.87	11.13	2.697	
1,600.00	1,600.00	1,600.00	1,600.00	6.42	5.52	90.19		-0.10	30.00	30.00	18.52	11.48	2.612	
1,650.00	1,650.00	1,650.00	1,650.00	6.60	5.70	90.19		-0.10	30.00	30.00	18.16	11.84	2.533	
1,700.00	1,700.00	1,700.00	1,700.00	6.78	5.88	90.19		-0.10	30.00	30.00	17.80	12.20	2.458	
1,716.67	1,716.67	1,716.67	1,716.67	6.84	5.94	90.19		-0.10	30.00	30.00	17.68	12.32	2.434	
1,750.00	1,750.00	1,750.00	1,750.00	6.96	6.05	90.19		-0.10	30.00	30.00	17.44	12.56	2.388	
1,800.00	1,800.00	1,800.00	1,800.00	7.15	6.23	90.19		-0.10	30.00	30.00	17.08	12.92	2.322	
1,850.00	1,850.00	1,850.00	1,850.00	7.33	6.41	90.19		-0.10	30.00	30.00	16.72	13.28	2.259	
1,900.00	1,900.00	1,900.00	1,900.00	7.51	6.59	90.19		-0.10	30.00	30.00	16.36	13.64	2.199	
1,950.00	1,950.00	1,950.00	1,950.00	7.69	6.77	90.19		-0.10	30.00	30.00	16.00	14.00	2.143	
2,000.00	2,000.00	2,000.00	2,000.00	7.87	6.95	90.19		-0.10	30.00	30.00	15.64	14.36	2.089	
2,050.00	2,050.00	2,050.00	2,050.00	8.05	7.13	90.19		-0.10	30.00	30.00	15.28	14.72	2.038	
2,100.00	2,100.00	2,100.00	2,100.00	8.23	7.31	90.19		-0.10	30.00	30.00	14.92	15.08	1.990	
2,150.00	2,150.00	2,150.00	2,150.00	8.41	7.49	90.19		-0.10	30.00	30.00	14.56	15.44	1.943	
2,200.00	2,200.00	2,200.00	2,200.00	8.60	7.67	90.19		-0.10	30.00	30.00	14.20	15.80	1.899	
2,250.00	2,250.00	2,250.00	2,250.00	8.78	7.85	90.19		-0.10	30.00	30.00	13.85	16.15	1.857	
2,300.00	2,300.00	2,300.00	2,300.00	8.96	8.03	90.19		-0.10	30.00	30.00	13.49	16.51	1.817	
2,350.00	2,350.00	2,350.00	2,350.00	9.14	8.21	90.19		-0.10	30.00	30.00	13.13	16.87	1.778	
2,400.00	2,400.00	2,400.00	2,400.00	9.32	8.38	90.19		-0.10	30.00	30.00	12.77	17.23	1.741	
2,450.00	2,450.00	2,450.00	2,450.00	9.50	8.56	90.19		-0.10	30.00	30.00	12.41	17.59	1.706	
2,500.00	2,500.00	2,500.00	2,500.00	9.68	8.74	90.19		-0.10	30.00	30.00	12.05	17.95	1.671	
2,550.00	2,550.00	2,550.00	2,550.00	9.86	8.92	90.19		-0.10	30.00	30.00	11.69	18.31	1.639	
2,600.00	2,600.00	2,600.00	2,600.00	10.04	9.10	90.19		-0.10	30.00	30.00	11.33	18.67	1.607	
2,650.00	2,650.00	2,650.00	2,650.00	10.22	9.28	90.19		-0.10	30.00	30.00	10.97	19.03	1.577	
2,700.00	2,700.00	2,700.00	2,700.00	10.40	9.46	90.19		-0.10	30.00	30.00	10.62	19.38	1.548	
2,750.00	2,750.00	2,750.00	2,750.00	10.58	9.64	90.19		-0.10	30.00	30.00	10.26	19.74	1.520	
2,800.00	2,800.00	2,800.00	2,800.00	10.76	9.82	90.19		-0.10	30.00	30.00	9.90	20.10	1.492 Level 3	
2,850.00	2,850.00	2,850.00	2,850.00	10.94	10.00	90.19		-0.10	30.00	30.00	9.54	20.46	1.466 Level 3	
2,900.00	2,900.00	2,900.00	2,900.00	11.12	10.18	90.19		-0.10	30.00	30.00	9.18	20.82	1.441 Level 3	
2,950.00	2,950.00	2,950.00	2,950.00	11.30	10.36	90.19		-0.10	30.00	30.00	8.82	21.18	1.417 Level 3	
3,000.00	3,000.00	3,000.00	3,000.00	11.48	10.54	90.19		-0.10	30.00	30.00	8.46	21.54	1.393 Level 3	
3,050.00	3,050.00	3,050.00	3,050.00	11.66	10.71	90.19		-0.10	30.00	30.00	8.10	21.90	1.370 Level 3	
3,100.00	3,100.00	3,100.00	3,100.00	11.84	10.89	90.19		-0.10	30.00	30.00	7.75	22.25	1.348 Level 3	
3,150.00	3,150.00	3,150.00	3,150.00	12.02	11.07	90.19		-0.10	30.00	30.00	7.39	22.61	1.327 Level 3	
3,200.00	3,200.00	3,200.00	3,200.00	12.20	11.25	90.19		-0.10	30.00	30.00	7.03	22.97	1.306 Level 3	
3,250.00	3,250.00	3,250.00	3,250.00	12.38	11.43	90.19		-0.10	30.00	30.00	6.67	23.33	1.286 Level 3	
3,300.00	3,300.00	3,300.00	3,300.00	12.56	11.61	90.19		-0.10	30.00	30.00	6.31	23.69	1.266 Level 3, CC	
3,350.00	3,350.00	3,349.74	3,349.74	12.74	11.78	90.19		-0.10	30.22	30.22	6.18	24.04	1.257 Level 3, ES, SF	
3,400.00	3,400.00	3,399.47	3,399.46	12.92	11.96	90.19		-0.10	30.86	30.87	6.48	24.39	1.266 Level 3	
3,450.00	3,450.00	3,449.19	3,449.17	13.09	12.13	-23.83		-0.10	31.94	31.75	7.03	24.72	1.285 Level 3	
3,500.00	3,500.00	3,498.90	3,498.86	13.25	12.30	-24.29		-0.10	33.45	32.67	7.62	25.05	1.304 Level 3	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-126H - 126H Lateral - Plan #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HFR1+MS														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
3,550.00	3,549.98	3,548.60	3,548.52	13.41	12.47	-25.02	-0.10	35.39	33.64	8.26	25.38	1.325	Level 3		
3,600.00	3,599.96	3,598.29	3,598.16	13.56	12.64	-26.00	-0.10	37.76	34.64	8.94	25.70	1.348	Level 3		
3,650.00	3,649.92	3,647.97	3,647.76	13.72	12.81	-27.20	-0.10	40.56	35.70	9.68	26.03	1.372	Level 3		
3,700.00	3,699.87	3,697.64	3,697.32	13.88	12.98	-28.57	-0.10	43.79	36.87	10.51	26.35	1.399	Level 3		
3,750.00	3,749.81	3,747.28	3,746.83	14.04	13.15	-29.83	-0.10	47.45	38.42	11.75	26.68	1.440	Level 3		
3,800.00	3,799.75	3,796.90	3,796.27	14.20	13.32	-30.92	-0.10	51.53	40.42	13.43	27.00	1.497	Level 3		
3,850.00	3,849.69	3,846.47	3,845.65	14.36	13.50	-31.83	-0.10	56.04	42.87	15.55	27.32	1.569			
3,900.00	3,899.63	3,896.01	3,894.94	14.52	13.67	-32.56	-0.10	60.97	45.75	18.11	27.63	1.655			
3,950.00	3,949.57	3,945.49	3,944.13	14.68	13.84	-33.12	-0.10	66.32	49.06	21.11	27.95	1.755			
4,000.00	3,999.51	3,994.92	3,993.22	14.84	14.01	-33.52	-0.10	72.09	52.80	24.54	28.26	1.868			
4,050.00	4,049.45	4,044.71	4,042.64	15.01	14.18	-33.83	-0.10	78.16	56.80	28.18	28.61	1.985			
4,100.00	4,099.40	4,094.55	4,092.11	15.17	14.36	-34.11	-0.10	84.23	60.80	31.83	28.97	2.099			
4,150.00	4,149.34	4,144.39	4,141.57	15.33	14.53	-34.34	-0.10	90.30	64.80	35.48	29.32	2.210			
4,200.00	4,199.28	4,194.23	4,191.04	15.50	14.71	-34.55	-0.10	96.38	68.80	39.13	29.66	2.319			
4,250.00	4,249.22	4,244.07	4,240.51	15.66	14.88	-34.74	-0.10	102.45	72.80	42.79	30.01	2.426			
4,300.00	4,299.16	4,293.91	4,289.98	15.83	15.06	-34.91	-0.10	108.53	76.80	46.45	30.36	2.530			
4,350.00	4,349.10	4,343.75	4,339.44	15.99	15.23	-35.06	-0.10	114.60	80.81	50.10	30.70	2.632			
4,400.00	4,399.04	4,393.59	4,388.91	16.16	15.41	-35.19	-0.10	120.67	84.81	53.76	31.05	2.732			
4,450.00	4,448.98	4,443.42	4,438.38	16.32	15.58	-35.32	-0.10	126.75	88.81	57.42	31.39	2.829			
4,500.00	4,498.93	4,493.26	4,487.85	16.49	15.76	-35.43	-0.10	132.82	92.82	61.08	31.74	2.924			
4,550.00	4,548.87	4,543.10	4,537.31	16.66	15.93	-35.53	-0.10	138.90	96.82	64.74	32.09	3.018			
4,600.00	4,598.81	4,592.94	4,586.78	16.83	16.11	-35.63	-0.10	144.97	100.83	68.40	32.43	3.109			
4,650.00	4,648.75	4,642.78	4,636.25	16.99	16.28	-35.72	-0.10	151.04	104.84	72.06	32.78	3.198			
4,700.00	4,698.69	4,692.62	4,685.72	17.16	16.46	-35.80	-0.10	157.12	108.84	75.72	33.12	3.286			
4,750.00	4,748.63	4,742.46	4,735.18	17.33	16.64	-35.88	-0.10	163.19	112.85	79.38	33.47	3.372			
4,800.00	4,798.57	4,792.30	4,784.65	17.50	16.81	-35.95	-0.10	169.26	116.85	83.04	33.81	3.456			
4,850.00	4,848.51	4,842.14	4,834.12	17.67	16.99	-36.01	-0.10	175.34	120.86	86.70	34.16	3.538			
4,900.00	4,898.46	4,891.98	4,883.59	17.84	17.16	-36.07	-0.10	181.41	124.87	90.36	34.51	3.619			
4,950.00	4,948.40	4,941.81	4,933.05	18.01	17.34	-36.13	-0.10	187.49	128.88	94.02	34.85	3.698			
5,000.00	4,998.34	4,991.65	4,982.52	18.18	17.52	-36.19	-0.10	193.56	132.88	97.68	35.20	3.775			
5,050.00	5,048.28	5,041.49	5,031.99	18.35	17.70	-36.24	-0.10	199.63	136.89	101.34	35.55	3.851			
5,100.00	5,098.22	5,091.33	5,081.46	18.52	17.87	-36.29	-0.10	205.71	140.90	105.00	35.90	3.925			
5,150.00	5,148.16	5,141.17	5,130.92	18.69	18.05	-36.33	-0.10	211.78	144.90	108.66	36.24	3.998			
7,700.00	7,695.17	7,715.05	7,695.17	27.63	27.21	-46.14	-0.10	383.53	215.16	160.72	54.44	3.953			
7,750.00	7,745.11	7,764.99	7,745.11	27.81	27.38	-46.61	-0.10	383.53	213.48	158.69	54.79	3.896			
7,800.00	7,795.05	7,814.93	7,795.05	27.99	27.56	-47.08	-0.10	383.53	211.83	156.68	55.15	3.841			
7,850.00	7,844.99	7,864.87	7,844.99	28.16	27.74	-47.57	-0.10	383.53	210.18	154.68	55.50	3.787			
7,900.00	7,894.93	7,914.81	7,894.93	28.34	27.91	-48.06	-0.10	383.53	208.56	152.70	55.86	3.734			
7,950.00	7,944.87	7,964.75	7,944.87	28.52	28.09	-48.56	-0.10	383.53	206.94	150.73	56.21	3.681			
8,000.00	7,994.82	8,014.69	7,994.82	28.70	28.27	-49.06	-0.10	383.53	205.35	148.78	56.57	3.630			
8,050.00	8,044.76	8,064.64	8,044.76	28.88	28.44	-49.58	-0.10	383.53	203.77	146.84	56.92	3.580			
8,100.00	8,094.70	8,114.58	8,094.70	29.05	28.62	-50.10	-0.10	383.53	202.20	144.92	57.28	3.530			
8,150.00	8,144.64	8,164.52	8,144.64	29.23	28.80	-50.63	-0.10	383.53	200.66	143.02	57.64	3.481			
8,200.00	8,194.58	8,214.46	8,194.58	29.41	28.97	-51.17	-0.10	383.53	199.13	141.13	57.99	3.434			
8,250.00	8,244.52	8,264.40	8,244.52	29.59	29.15	-51.71	-0.10	383.53	197.62	139.26	58.35	3.387			
8,300.00	8,294.46	8,314.34	8,294.46	29.77	29.33	-52.27	-0.10	383.53	196.12	137.41	58.71	3.341			
8,350.00	8,344.40	8,364.28	8,344.40	29.95	29.50	-52.83	-0.10	383.53	194.65	135.58	59.07	3.295			
8,400.00	8,394.35	8,414.22	8,394.35	30.13	29.68	-53.41	-0.10	383.53	193.19	133.77	59.42	3.251			
8,450.00	8,444.29	8,464.17	8,444.29	30.30	29.86	-53.99	-0.10	383.53	191.76	131.98	59.78	3.208			
8,500.00	8,494.23	8,514.11	8,494.23	30.48	30.03	-54.58	-0.10	383.53	190.34	130.20	60.14	3.165			
8,550.00	8,544.17	8,564.05	8,544.17	30.66	30.21	-55.17	-0.10	383.53	188.95	128.45	60.50	3.123			
8,600.00	8,594.11	8,613.99	8,594.11	30.84	30.39	-55.78	-0.10	383.53	187.57	126.72	60.86	3.082			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	XTO Energy	Local Co-ordinate Reference:	Well RS25-166H - Slot RS25 166H SHL
Project:	Eddy County, NM (NAD27) NMEZ Grid	TVD Reference:	3061+22 @ 3083.00usft (Perseus)
Reference Site:	Remuda South 25 State Pad	MD Reference:	3061+22 @ 3083.00usft (Perseus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	RS25-166H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	166H Lateral	Database:	TP_EDM
Reference Design:	Plan #1	Offset TVD Reference:	Reference Datum

Offset Design Remuda South 25 State Pad - RS25-126H - 126H Lateral - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major A is			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
8,650.00	8,644.05	8,663.93	8,644.05	31.02	30.56	-56.40	-0.10	383.53	186.22	125.01	61.21	3.042		
8,700.00	8,693.99	8,713.87	8,693.99	31.20	30.74	-57.02	-0.10	383.53	184.89	123.32	61.57	3.003		
8,750.00	8,743.93	8,763.81	8,743.93	31.38	30.92	-57.65	-0.10	383.53	183.58	121.65	61.93	2.964		
8,800.00	8,793.88	8,813.75	8,793.88	31.55	31.09	-58.30	-0.10	383.53	182.30	120.00	62.29	2.927		
8,850.00	8,843.82	8,863.70	8,843.82	31.73	31.27	-58.95	-0.10	383.53	181.03	118.38	62.65	2.890		
8,900.00	8,893.76	8,913.64	8,893.76	31.91	31.45	-59.61	-0.10	383.53	179.79	116.78	63.01	2.853		
8,950.00	8,943.70	8,963.58	8,943.70	32.09	31.63	-60.28	-0.10	383.53	178.58	115.21	63.37	2.818		
9,000.00	8,993.64	9,013.52	8,993.64	32.27	31.80	-60.96	-0.10	383.53	177.39	113.66	63.73	2.783		
9,050.00	9,043.58	9,063.46	9,043.58	32.45	31.98	-61.65	-0.10	383.53	176.23	112.14	64.09	2.750		
9,100.00	9,093.52	9,113.40	9,093.52	32.63	32.16	-62.34	-0.10	383.53	175.09	110.64	64.45	2.717		
9,150.00	9,143.46	9,163.34	9,143.46	32.81	32.33	-63.05	-0.10	383.53	173.98	109.16	64.81	2.684		
9,200.00	9,193.41	9,213.28	9,193.41	32.98	32.51	-63.76	-0.10	383.53	172.89	107.72	65.17	2.653		
9,250.00	9,243.35	9,263.23	9,243.35	33.16	32.69	-64.49	-0.10	383.53	171.83	106.30	65.53	2.622		
9,300.00	9,293.29	9,313.17	9,293.29	33.34	32.87	-65.22	-0.10	383.53	170.80	104.91	65.90	2.592		
9,350.00	9,343.23	9,363.11	9,343.23	33.52	33.04	-65.96	-0.10	383.53	169.80	103.54	66.26	2.563		
9,400.00	9,393.17	9,413.05	9,393.17	33.70	33.22	-66.71	-0.10	383.53	168.83	102.21	66.62	2.534		
9,450.00	9,443.11	9,462.99	9,443.11	33.88	33.40	-67.47	-0.10	383.53	167.88	100.90	66.98	2.506		
9,500.00	9,493.05	9,512.93	9,493.05	34.06	33.57	-68.24	-0.10	383.53	166.97	99.63	67.34	2.479		
9,550.00	9,542.99	9,562.87	9,542.99	34.24	33.75	-69.01	-0.10	383.53	166.08	98.38	67.70	2.453		
9,600.00	9,592.94	9,612.81	9,592.94	34.42	33.93	-69.80	-0.10	383.53	165.23	97.16	68.07	2.427		
9,650.00	9,642.88	9,662.76	9,642.88	34.60	34.11	-70.59	-0.10	383.53	164.41	95.98	68.43	2.403		
9,700.00	9,692.82	9,712.70	9,692.82	34.77	34.28	-71.39	-0.10	383.53	163.62	94.83	68.79	2.378		
9,750.00	9,742.76	9,762.64	9,742.76	34.95	34.46	-72.20	-0.10	383.53	162.86	93.71	69.16	2.355		
9,800.00	9,792.70	9,812.58	9,792.70	35.13	34.64	-73.01	-0.10	383.53	162.14	92.62	69.52	2.332		
9,850.00	9,842.64	9,862.52	9,842.64	35.31	34.82	-73.83	-0.10	383.53	161.44	91.56	69.88	2.310		
9,900.00	9,892.58	9,912.46	9,892.58	35.49	34.99	-74.66	-0.10	383.53	160.79	90.54	70.24	2.289		
9,950.00	9,942.52	9,962.40	9,942.52	35.67	35.17	-75.49	-0.10	383.53	160.16	89.55	70.61	2.268		
10,000.00	9,992.47	10,012.34	9,992.47	35.85	35.35	-76.34	-0.10	383.53	159.57	88.60	70.97	2.248		
10,050.00	10,042.41	10,064.13	10,044.24	36.03	35.53	-76.97	-0.64	383.97	158.86	87.54	71.32	2.228		
10,100.00	10,092.35	10,117.39	10,097.23	36.21	35.71	-76.07	-4.57	387.22	157.21	85.60	71.61	2.195		
10,150.00	10,142.29	10,169.68	10,148.58	36.39	35.89	-73.44	-12.10	393.45	154.73	82.83	71.90	2.152		
10,200.00	10,192.23	10,220.20	10,197.15	36.57	36.06	-69.14	-22.77	402.28	152.04	79.81	72.23	2.105		
10,250.00	10,242.17	10,268.30	10,242.09	36.75	36.21	-63.42	-35.96	413.19	150.16	77.57	72.59	2.069		
10,272.01	10,264.16	10,288.58	10,260.58	36.82	36.28	-60.54	-42.38	418.50	149.91	77.19	72.72	2.061		
10,300.00	10,292.11	10,313.53	10,282.90	36.92	36.36	-58.66	-50.96	425.60	150.38	77.57	72.81	2.065		
10,350.00	10,342.06	10,355.63	10,319.39	37.10	36.49	-49.40	-67.12	438.97	154.05	81.49	72.56	2.123		
10,400.00	10,392.00	10,394.50	10,351.64	37.28	36.61	-42.21	-83.83	452.79	162.25	90.69	71.56	2.267		
10,450.00	10,441.94	10,430.18	10,379.88	37.46	36.72	-35.53	-100.62	466.69	175.52	105.66	69.86	2.513		
10,500.00	10,491.88	10,462.81	10,404.48	37.64	36.81	-29.60	-117.14	480.35	193.80	126.06	67.74	2.861		
10,550.00	10,541.82	10,492.57	10,425.82	37.82	36.90	-24.50	-133.12	493.57	216.63	151.09	65.54	3.306		
10,600.00	10,591.76	10,519.69	10,444.30	38.00	36.97	-20.18	-148.41	506.22	243.36	179.92	63.44	3.836		