

Well Name: OUTRIDER 27 FED	Well Location: T24S / R32E / SEC 28 / SESW /	County or Parish/State: /
Well Number: 605H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM016353	Unit or CA Name:	Unit or CA Number:
US Well Number: 300255028700X1	Well Status: Drilling Well	Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2697566

Type of Submission: Notice of Intent	Type of Action: Drilling Operations
Date Sundry Submitted: 10/11/2022	Time Sundry Submitted: 02:45
Date proposed operation will begin: 10/11/2022	

Procedure Description: XTO Energy, Inc., respectfully provides update and notice of change plans for the Outrider 27 Federal 605H due to a wellbore collision with XTO's Outrider 27 Federal 509H (API: 30-025-50237) at approximately ~1553' MD/1580'TVD in the intermediate portion of the wells due to severe bit drift. Post-collision, XTO pressure tested the 605H with the 509H well shut-in where it was observed the wellbores were communicating with each other. XTO pumped a 500' 17.5ppg Class H cement plug at the base of the Outrider 27 Federal 605H (1580'MD), WOC, and tagged TOC at 1557'MD in the 605H bore, indicating that the majority of the cement fell into the Outrider 27 Federal 509H wellbore. A second 800' 14.8ppg Class C cement plug was then pumped at 1557MD'. After WOC, we were able to tag the plug at ~1123'MD. Pursuant to email approval from Long Vo, XTO is utilizing the recently tagged plug at 1123'MD as a kick-off plug, then deviating and paralleling the existing 605H well with no changes anticipated to MD/TVD. No change in casing/cement configuration are requested at this time. Attachments: AC Report

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

605H_BOP1_AC_REPORT_20221011144501.PDF

Well Name: OUTRIDER 27 FED

Well Location: T24S / R32E / SEC 28 / SESW /

County or Parish/State: /

Well Number: 605H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM016353

Unit or CA Name:

Unit or CA Number:

US Well Number: 300255028700X1

Well Status: Drilling Well

Operator: XTO ENERGY INCORPORATED

Conditions of Approval

Specialist Review

Mail__Vo__Long_T__Outlook_20221215062050.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: JESSICA DOOLING

Signed on: OCT 11, 2022 02:45 PM

Name: XTO ENERGY INCORPORATED

Title: Lead Regulatory Coordinator

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND

State: TX

Phone: (970) 769-6048

Email address: JESSICA.DOOLING@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: LVO@BLM.GOV

Disposition: Accepted

Disposition Date: 12/15/2022

Signature: Long Vo



XTO ENERGY INC.

**LEA COUNTY, NM
OUTRIDER 27 FED
O27F 605H**

**O27F 605H ST1
BOP1123**

Anticollision Risk Report

09 October, 2022





GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Reference	BOP1123		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 50.00usft	Error Model:	ISCWSA
Depth Range:	0.00 to 12,000.00usft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,490.22usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Risk Settings		
Vertical Depth for Analysis:	usft	(Below TVD Reference Datum)
Level of Acceptable Risk (1 in):		
Minimum Separation:	0	usft

Survey Tool Program		Date	10/9/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
171.00	1,062.00	GGDS SURVEY SH (O27F 605H OH)	XOMR2_OWSG MWD+IFR1	OWSG MWD + IFR1 + Multi-Station Correction	
1,192.00	1,123.00	GGDS SURVEY INT (O27F 605H OH)	XOMR2_OWSG MWD+IFR1	OWSG MWD + IFR1 + Multi-Station Correction	
1,123.00	12,902.24	BOP1123 (O27F 605H ST1)	XOMR2_OWSG MWD+IFR1	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						
OUTRIDER 27 FED						
O27F 509H - O27F 509H - O27F 509H	1,362.13	1,361.27	16.51	7.59	1.852 CC, ES	
O27F 509H - O27F 509H - O27F 509H	1,400.00	1,398.85	16.97	7.80	1.850 SF	
O27F 509H - O27F 509H - PLAN 4	926.76	925.52	23.87	17.87	3.975 CC	
O27F 509H - O27F 509H - PLAN 4	3,250.00	3,227.46	35.05	12.11	1.528 ES, SF	
O27F 510H - O27F 510H - O27F 510H	0.00	0.00	30.02			
O27F 510H - O27F 510H - O27F 510H	50.00	48.98	30.06	29.95	275.559 ES	
O27F 510H - O27F 510H - O27F 510H	1,050.00	1,048.41	44.71	37.98	6.643 SF	
O27F 510H - O27F 510H - PLAN 3	0.00	0.00	30.02			
O27F 510H - O27F 510H - PLAN 3	500.00	498.99	32.48	29.51	10.932 ES	
O27F 510H - O27F 510H - PLAN 3	12,000.00	12,084.57	330.43	245.62	3.896 SF	
O27F 511H - O27F 511H - O27F 511H	0.00	0.00	60.00			
O27F 511H - O27F 511H - O27F 511H	50.00	49.91	60.08	59.96	532.080 ES	
O27F 511H - O27F 511H - O27F 511H	1,050.00	1,050.83	69.02	62.37	10.373 SF	
O27F 511H - O27F 511H - PLAN 5	0.00	0.00	60.00			
O27F 511H - O27F 511H - PLAN 5	500.00	499.99	62.47	59.50	21.004 ES	
O27F 511H - O27F 511H - PLAN 5	6,300.00	6,267.87	304.96	255.62	6.181 SF	
O27F 512H - O27F 512H - O27F 512H	805.26	806.39	89.03	84.12	18.114 CC, ES	
O27F 512H - O27F 512H - O27F 512H	1,050.00	1,048.22	98.59	91.94	14.835 SF	
O27F 512H - O27F 512H - PLAN 6	0.00	0.00	90.01			
O27F 512H - O27F 512H - PLAN 6	600.00	599.28	93.08	89.41	25.355 ES	
O27F 512H - O27F 512H - PLAN 6	6,300.00	6,203.92	654.83	604.59	13.034 SF	
O27F 605H - O27F 605H OH - O27F 605H OH	1,123.00	1,123.00	0.04			
O27F 605H - O27F 605H OH - O27F 605H OH	1,150.00	1,150.00	0.11	-0.04	0.747 Level 1 , ES, SF	
O27F 605H - O27F 605H OH - PLAN 3	0.00	0.00	0.00			
O27F 605H - O27F 605H OH - PLAN 3	12,000.00	11,968.29	0.29	-84.10	0.003 Level 1 , ES, SF	
O27F 605H - O27F 605H ST1 - O27F 605H ST1	1 123.00	1 123.00	0.16	-3.35	0.047 Level 1 , CC, ES, SF	

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

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						
OUTRIDER 27 FED						
O27F 605H - O27F 605H ST1 - PLAN 3	0.00	0.00	0.00			
O27F 605H - O27F 605H ST1 - PLAN 3	12,000.00	11,968.29	0.29	-84.10	0.003 Level 1 , ES, SF	

Offset Design													OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H		Offset Site Error: 0.00 usft	
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS													Offset Well Error: 0.00 usft			
Reference		Offset		Semi Major Axis		Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision				
0.00	0.00	0.00	0.00	0.00	0.00	179.62	29.92					0				
50.00	50.00	48.99	48.99	0.04	0.07	49.81	29.87	29.76	0.11	272.977	0					
100.00	100.00	98.97	98.97	0.13	0.15	50.17	29.80	29.52	0.27	108.686	0					
150.00	150.00	148.96	148.96	0.22	0.22	50.77	29.67	29.23	0.44	67.601	0					
200.00	200.00	198.93	198.93	0.36	0.33	60.69	29.52	28.83	0.68	43.123	0					
250.00	250.00	248.93	248.93	0.54	0.51	55.16	29.42	28.38	1.04	28.225	0					
300.00	299.99	298.94	298.94	0.71	0.69	40.01	29.24	27.84	1.40	20.883	0					
350.00	349.99	348.93	348.93	0.89	0.87	13.97	29.00	27.25	1.76	16.518	0					
400.00	399.99	398.92	398.91	1.07	1.04	-23.37	28.80	26.69	2.11	13.643	0					
450.00	449.99	448.87	448.86	1.24	1.22	-38.24	28.63	26.16	2.46	11.618	0					
500.00	499.99	498.81	498.80	1.42	1.40	-45.15	28.50	25.69	2.82	10.119	0					
550.00	549.98	548.77	548.75	1.59	1.58	-49.09	28.43	25.26	3.17	8.965	0					
600.00	599.98	598.73	598.70	1.77	1.76	-51.36	28.38	24.86	3.52	8.052	0					
650.00	649.97	648.65	648.59	1.94	1.94	-51.48	28.35	24.47	3.88	7.307	0					
700.00	699.95	698.55	698.47	2.12	2.12	-51.28	28.30	24.07	4.23	6.684	0					
724.18	724.12	722.67	722.58	2.20	2.21	-50.88	28.29	23.88	4.41	6.421	0					
750.00	749.93	748.42	748.31	2.30	2.30	-50.57	28.30	23.71	4.59	6.166	0					
800.00	799.90	798.31	798.17	2.47	2.48	-51.03	28.38	23.43	4.95	5.738	0					
850.00	849.85	848.30	848.13	2.65	2.66	-53.28	28.40	23.09	5.30	5.356	0					
900.00	899.80	898.38	898.17	2.83	2.84	-54.78	28.28	22.62	5.66	4.997	0					
950.00	949.73	948.48	948.23	3.01	3.02	-55.76	27.77	21.75	6.02	4.616	0					
1,000.00	999.65	998.50	998.22	3.19	3.20	-56.30	27.02	20.65	6.37	4.239	0					
1,050.00	1,049.55	1,048.62	1,048.30	3.36	3.38	-56.68	25.95	19.22	6.73	3.855	0					
1,100.00	1,099.44	1,098.77	1,098.40	3.54	3.56	-57.82	24.47	17.37	7.09	3.450	0					
1,150.00	1,149.35	1,149.12	1,148.71	3.72	3.74	-66.14	22.63	15.19	7.45	3.039	0					
1,200.00	1,199.28	1,199.46	1,198.99	3.90	3.92	-85.06	20.71	12.91	7.81	2.654	0					
1,250.00	1,249.23	1,249.61	1,249.08	4.08	4.09	-105.07	18.85	10.70	8.15	2.312	0					
1,300.00	1,299.20	1,299.63	1,299.05	4.25	4.26	-137.73	17.40	8.90	8.50	2.048	0					
1,350.00	1,349.18	1,349.24	1,348.60	4.42	4.42	-167.04	16.57	7.74	8.83	1.876	0					
1,362.13	1,361.31	1,361.27	1,360.62	4.46	4.46	-179.28	16.51	7.59	8.92	1.852	0					
1,400.00	1,399.17	1,398.85	1,398.15	4.59	4.59	128.98	16.97	7.80	9.17	1.850	0		CC, ES SF			
1,450.00	1,449.17	1,448.49	1,447.75	4.76	4.75	91.57	17.73	8.23	9.51	1.865	0					
1,500.00	1,499.14	1,498.21	1,497.43	4.92	4.92	92.10	19.37	9.54	9.84	1.969	0					
1,550.00	1,549.09	1,548.03	1,547.22	5.09	5.09	97.30	21.49	11.31	10.18	2.112	0					
1,600.00	1,599.00	1,597.81	1,596.93	5.26	5.26	97.14	24.03	13.52	10.51	2.286	0					
1,650.00	1,648.85	1,647.52	1,646.58	5.43	5.44	102.68	26.93	16.07	10.86	2.480	0					
1,700.00	1,698.64	1,697.15	1,696.11	5.60	5.61	110.99	30.79	19.60	11.19	2.751	0					
1,750.00	1,748.34	1,747.05	1,745.94	5.77	5.79	118.50	35.34	23.81	11.53	3.066	0					
1,800.00	1,797.95	1,797.23	1,796.09	5.94	5.97	124.83	40.24	28.39	11.86	3.394	0					
1,850.00	1,847.45	1,847.46	1,846.31	6.11	6.14	129.72	45.17	32.98	12.18	3.708	0					
1,900.00	1,896.82	1,897.89	1,896.71	6.29	6.32	133.65	50.12	37.62	12.50	4.009	0					

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H												Offset Well Error:	0.00 usft
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
1,950.00	1,946.05	1,948.55	1,947.31	6.46	6.49	136.79	54.91	42.10	12.82	4.285	0		
2,000.00	1,995.12	1,999.29	1,997.88	6.63	6.66	139.28	59.49	46.37	13.13	4.532	0		
2,050.00	2,044.02	2,048.50	2,046.50	6.80	6.83	141.17	63.86	50.41	13.44	4.750	0		
2,100.00	2,092.73	2,101.13	2,098.97	6.98	7.00	142.51	67.99	54.24	13.75	4.945	0		
2,150.00	2,141.24	2,152.17	2,149.34	7.15	7.17	143.34	71.91	57.84	14.06	5.114	0		
2,200.00	2,189.53	2,203.00	2,199.27	7.33	7.35	143.71	75.71	61.34	14.37	5.267	0		
2,250.00	2,237.60	2,253.83	2,248.94	7.51	7.52	143.68	79.49	64.80	14.69	5.412	0		
2,300.00	2,285.41	2,304.48	2,298.17	7.69	7.69	143.27	83.36	68.35	15.00	5.555	0		
2,350.00	2,332.97	2,355.27	2,347.22	7.87	7.86	142.53	87.35	72.03	15.33	5.700	0		
2,400.00	2,380.25	2,406.27	2,396.14	8.05	8.04	141.55	91.36	75.71	15.65	5.837	0		
2,450.00	2,427.24	2,457.69	2,445.10	8.24	8.21	140.43	95.29	79.31	15.99	5.961	0		
2,500.00	2,473.96	2,509.58	2,494.26	8.42	8.39	139.76	98.81	82.47	16.34	6.049	0		
2,550.00	2,520.63	2,560.82	2,542.64	8.61	8.57	139.43	101.52	84.81	16.71	6.076	0		
2,600.00	2,567.30	2,611.80	2,590.81	8.80	8.75	139.48	103.71	86.63	17.08	6.072	0		
2,650.00	2,613.97	2,662.64	2,638.89	8.99	8.94	139.90	105.44	87.99	17.45	6.043	0		
2,700.00	2,660.64	2,713.44	2,686.98	9.18	9.12	140.67	106.77	88.96	17.81	5.994	0		
2,750.00	2,707.32	2,764.07	2,734.96	9.38	9.30	141.82	107.78	89.60	18.18	5.929	0		
2,800.00	2,753.99	2,814.63	2,782.91	9.57	9.49	143.36	108.53	90.00	18.54	5.855	0		
2,850.00	2,800.66	2,865.04	2,830.74	9.77	9.68	145.16	109.11	90.22	18.90	5.774	0		
2,900.00	2,847.33	2,915.33	2,878.43	9.97	9.86	147.12	109.57	90.32	19.25	5.691	0		
2,950.00	2,894.00	2,965.20	2,925.74	10.17	10.05	149.20	110.08	90.47	19.61	5.613	0		
3,000.00	2,940.67	3,014.98	2,972.99	10.37	10.23	151.41	110.74	90.77	19.97	5.545	0		
3,050.00	2,987.34	3,064.60	3,020.12	10.57	10.42	153.71	111.62	91.29	20.33	5.491	0		
3,100.00	3,034.01	3,114.18	3,067.27	10.77	10.60	156.11	112.78	92.09	20.69	5.451	0		
3,150.00	3,080.68	3,163.72	3,114.42	10.97	10.79	158.58	114.22	93.17	21.05	5.426	0		
3,200.00	3,127.35	3,212.57	3,160.96	11.17	10.97	161.08	116.04	94.62	21.41	5.419	0		
3,250.00	3,174.02	3,260.66	3,206.95	11.38	11.15	163.54	118.67	96.89	21.78	5.449	0		
3,300.00	3,220.69	3,308.99	3,253.34	11.58	11.34	165.97	122.17	100.02	22.14	5.517	0		
3,350.00	3,267.36	3,357.52	3,300.04	11.79	11.52	168.39	126.32	103.80	22.51	5.611	0		
3,400.00	3,314.03	3,405.86	3,346.66	11.99	11.70	170.70	131.12	108.23	22.89	5.729	0		
3,450.00	3,360.70	3,454.12	3,393.32	12.20	11.88	172.71	136.56	113.30	23.26	5.871	0		
3,500.00	3,407.37	3,503.50	3,441.18	12.41	12.07	174.35	142.48	118.83	23.65	6.025	0		
3,550.00	3,454.05	3,553.81	3,489.93	12.62	12.26	175.40	148.29	124.25	24.04	6.169	0		
3,600.00	3,500.72	3,604.02	3,538.53	12.82	12.45	175.86	153.91	129.48	24.43	6.299	0		
3,650.00	3,547.39	3,654.19	3,587.04	13.03	12.64	175.81	159.38	134.55	24.83	6.418	0		
3,700.00	3,594.06	3,705.19	3,636.24	13.24	12.84	175.41	164.60	139.36	25.24	6.523	0		
3,750.00	3,640.73	3,756.40	3,685.50	13.45	13.03	174.86	169.40	143.75	25.64	6.606	0		
3,800.00	3,687.40	3,807.85	3,734.86	13.66	13.23	174.24	173.75	147.69	26.05	6.669	0		
3,850.00	3,734.07	3,859.15	3,783.91	13.87	13.43	173.60	177.64	151.18	26.47	6.712	0		
3,900.00	3,780.74	3,909.49	3,831.98	14.08	13.63	173.06	181.30	154.42	26.87	6.746	0		
3,950.00	3,827.41	3,959.92	3,880.13	14.29	13.82	172.66	184.82	157.54	27.28	6.774	0		
4,000.00	3,874.08	4,010.52	3,928.40	14.51	14.02	172.36	188.18	160.48	27.70	6.794	0		
4,050.00	3,920.75	4,060.75	3,976.29	14.72	14.22	172.15	191.36	163.26	28.11	6.809	0		
4,100.00	3,967.42	4,110.43	4,023.66	14.93	14.42	171.95	194.57	166.05	28.51	6.824	0		
4,150.00	4,014.09	4,159.69	4,070.66	15.14	14.61	171.75	197.85	168.93	28.92	6.841	0		
4,200.00	4,060.76	4,208.56	4,117.35	15.36	14.81	171.58	201.37	172.04	29.33	6.866	0		
4,250.00	4,107.43	4,258.58	4,165.18	15.57	15.00	171.42	205.06	175.32	29.74	6.895	0		
4,300.00	4,154.10	4,309.45	4,213.78	15.78	15.21	171.27	208.54	178.39	30.15	6.916	0		
4,350.00	4,200.78	4,360.89	4,262.83	16.00	15.41	171.13	211.75	181.18	30.57	6.926	0		
4,400.00	4,247.45	4,412.59	4,312.01	16.21	15.62	171.02	214.54	183.55	30.99	6.923	0		
4,450.00	4,294.12	4,464.29	4,361.07	16.42	15.83	170.92	216.93	185.52	31.41	6.906	0		
4,500.00	4,340.79	4,515.96	4,409.96	16.64	16.04	170.82	218.91	187.07	31.84	6.876	0		

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H												Offset Well Error:	0.00 usft
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
4,550.00	4,387.46	4,566.22	4,457.45	16.85	16.24	170.71	220.67	188.41	32.25	6.842	0		
4,600.00	4,434.13	4,615.94	4,504.40	17.07	16.44	170.60	222.37	189.70	32.67	6.807	0		
4,650.00	4,480.80	4,662.52	4,548.53	17.28	16.63	170.54	224.52	191.45	33.07	6.789	0		
4,700.00	4,527.47	4,709.83	4,593.59	17.50	16.82	170.55	227.42	193.95	33.48	6.794	0		
4,750.00	4,574.14	4,762.55	4,643.80	17.71	17.04	170.66	230.23	196.33	33.90	6.791	0		
4,800.00	4,620.81	4,814.18	4,692.80	17.93	17.25	170.85	232.47	198.15	34.32	6.773	0		
4,850.00	4,667.48	4,863.44	4,739.56	18.15	17.45	171.16	234.68	199.95	34.73	6.757	0		
4,900.00	4,714.15	4,913.34	4,786.98	18.36	17.65	171.60	237.02	201.88	35.14	6.744	0		
4,950.00	4,760.82	4,964.22	4,835.30	18.58	17.86	172.15	239.24	203.68	35.56	6.728	0		
5,000.00	4,807.49	5,014.57	4,883.05	18.79	18.06	172.79	241.30	205.33	35.97	6.708	0		
5,050.00	4,854.16	5,064.43	4,930.34	19.01	18.26	173.48	243.38	207.00	36.38	6.690	0		
5,100.00	4,900.83	5,114.00	4,977.34	19.23	18.46	174.21	245.51	208.72	36.79	6.674	0		
5,150.00	4,947.50	5,163.39	5,024.21	19.45	18.66	174.94	247.77	210.57	37.20	6.661	0		
5,200.00	4,994.18	5,212.59	5,070.93	19.66	18.86	175.61	250.17	212.57	37.60	6.653	0		
5,250.00	5,040.85	5,261.79	5,117.70	19.88	19.06	176.07	252.75	214.73	38.01	6.649	0		
5,300.00	5,087.52	5,310.20	5,163.80	20.10	19.26	176.33	255.53	217.10	38.42	6.650	0		
5,350.00	5,134.19	5,358.39	5,209.77	20.31	19.46	176.41	258.64	219.81	38.83	6.660	0		
5,400.00	5,180.86	5,408.00	5,257.16	20.53	19.66	176.35	261.97	222.72	39.25	6.675	0		
5,450.00	5,227.53	5,457.92	5,304.82	20.75	19.86	176.21	265.30	225.63	39.67	6.688	0		
5,500.00	5,274.20	5,508.62	5,353.20	20.97	20.07	176.02	268.56	228.47	40.09	6.699	0		
5,550.00	5,320.87	5,559.39	5,401.59	21.19	20.27	175.83	271.66	231.14	40.51	6.705	0		
5,600.00	5,367.54	5,609.72	5,449.54	21.40	20.48	175.67	274.64	233.70	40.94	6.709	0		
5,650.00	5,414.21	5,659.64	5,497.07	21.62	20.68	175.54	277.55	236.19	41.36	6.711	0		
5,700.00	5,460.88	5,707.53	5,542.74	21.84	20.88	175.44	280.67	238.90	41.77	6.720	0		
5,750.00	5,507.55	5,755.95	5,589.02	22.06	21.08	175.36	284.15	241.96	42.18	6.736	0		
5,800.00	5,554.22	5,806.73	5,637.54	22.28	21.28	175.25	287.63	245.03	42.61	6.751	0		
5,850.00	5,600.89	5,857.27	5,685.80	22.49	21.49	175.12	290.97	247.94	43.03	6.762	0		
5,900.00	5,647.56	5,907.32	5,733.57	22.71	21.69	175.01	294.25	250.80	43.45	6.772	0		
5,950.00	5,694.23	5,957.68	5,781.62	22.93	21.90	174.92	297.49	253.62	43.87	6.780	0		
6,000.00	5,740.91	6,008.41	5,830.01	23.15	22.11	174.86	300.61	256.31	44.30	6.786	0		
6,050.00	5,787.58	6,058.04	5,877.31	23.37	22.31	174.82	303.65	258.93	44.72	6.790	0		
6,100.00	5,834.25	6,106.82	5,923.86	23.59	22.51	174.80	306.84	261.70	45.14	6.798	0		
6,150.00	5,880.92	6,157.00	5,971.78	23.81	22.72	174.79	310.14	264.58	45.56	6.808	0		
6,200.00	5,927.59	6,208.05	6,020.48	24.03	22.93	174.77	313.28	267.30	45.98	6.813	0		
6,250.00	5,974.26	6,258.59	6,068.64	24.25	23.13	174.74	316.27	269.86	46.41	6.815	0		
6,300.00	6,021.08	6,308.99	6,116.65	24.46	23.34	174.71	318.77	271.86	46.90	6.796	0		
6,350.00	6,068.20	6,355.96	6,161.44	24.68	23.53	174.69	320.56	273.19	47.37	6.767	0		
6,400.00	6,115.60	6,402.46	6,205.94	24.89	23.72	174.70	322.02	274.20	47.82	6.734	0		
6,450.00	6,163.27	6,448.01	6,249.69	25.10	23.91	174.75	323.22	274.97	48.25	6.699	0		
6,500.00	6,211.20	6,493.37	6,293.44	25.30	24.09	174.81	324.26	275.59	48.66	6.663	0		
6,550.00	6,259.37	6,538.82	6,337.45	25.51	24.27	174.90	325.14	276.08	49.06	6.628	0		
6,600.00	6,307.77	6,584.30	6,381.63	25.71	24.45	175.02	325.84	276.40	49.44	6.591	0		
6,650.00	6,356.38	6,629.19	6,425.39	25.90	24.62	175.16	326.40	276.61	49.79	6.555	0		
6,700.00	6,405.18	6,673.76	6,469.01	26.10	24.80	175.33	326.92	276.78	50.14	6.521	0		
6,750.00	6,454.17	6,718.58	6,513.00	26.28	24.96	175.53	327.38	276.92	50.46	6.488	0		
6,800.00	6,503.33	6,763.62	6,557.34	26.47	25.13	175.72	327.75	276.98	50.76	6.456	0		
6,850.00	6,552.63	6,808.71	6,601.84	26.65	25.30	175.89	328.00	276.95	51.05	6.425	0		
6,900.00	6,602.08	6,853.87	6,646.52	26.84	25.47	176.03	328.12	276.80	51.32	6.393	0		
6,950.00	6,651.64	6,900.49	6,692.74	27.01	25.64	176.14	328.07	276.49	51.58	6.360	0		
7,000.00	6,701.32	6,950.03	6,741.87	27.19	25.82	176.23	327.37	275.53	51.84	6.315	0		
7,050.00	6,751.08	6,999.45	6,790.90	27.36	25.99	176.32	325.88	273.80	52.07	6.258	0		
7,100.00	6,800.93	7,048.71	6,839.77	27.53	26.17	176.39	323.61	271.31	52.30	6.188	0		

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H												Offset Well Error:	0.00 usft
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
7,150.00	6,850.83	7,097.46	6,888.16	27.69	26.35	176.45	320.60	268.10	52.50	6.107	0		
7,200.00	6,900.78	7,145.68	6,936.04	27.86	26.52	176.58	316.96	264.28	52.68	6.017	0		
7,250.00	6,950.76	7,193.25	6,983.31	28.01	26.69	176.81	312.73	259.89	52.84	5.919	0		
7,300.00	7,000.76	7,240.24	7,030.02	28.17	26.86	177.13	308.06	255.09	52.97	5.816	0		
7,350.00	7,050.76	7,285.89	7,075.42	28.32	27.02	-84.02	303.44	250.17	53.27	5.697	0		
7,400.00	7,100.76	7,330.29	7,119.67	28.47	27.17	-83.71	299.66	246.10	53.56	5.594	0		
7,450.00	7,150.76	7,374.40	7,163.69	28.62	27.32	-83.51	296.81	242.95	53.86	5.511	0		
7,500.00	7,200.76	7,417.90	7,207.15	28.77	27.47	-83.39	295.01	240.85	54.16	5.447	0		
7,550.00	7,250.76	7,462.49	7,251.74	28.93	27.61	-83.37	294.28	239.83	54.45	5.404	0		
7,600.00	7,300.76	7,511.43	7,300.68	29.08	27.77	-83.38	294.04	239.27	54.76	5.369	0		
7,650.00	7,350.76	7,560.65	7,349.89	29.23	27.93	-83.37	293.96	238.89	55.07	5.338	0		
7,700.00	7,400.76	7,610.61	7,399.86	29.39	28.09	-83.38	293.94	238.56	55.39	5.307	0		
7,750.00	7,450.76	7,660.63	7,449.88	29.54	28.25	-83.40	293.93	238.23	55.70	5.277	0		
7,800.00	7,500.76	7,710.76	7,500.01	29.69	28.41	-83.42	293.90	237.88	56.01	5.247	0		
7,850.00	7,550.76	7,760.73	7,549.98	29.85	28.57	-83.43	293.85	237.52	56.33	5.217	0		
7,900.00	7,600.76	7,810.53	7,599.78	30.00	28.73	-83.45	293.83	237.19	56.64	5.188	0		
7,905.48	7,606.24	7,815.99	7,605.24	30.02	28.75	-83.45	293.83	237.15	56.67	5.184	0		
7,950.00	7,650.76	7,860.48	7,649.72	30.16	28.89	-83.47	293.83	236.88	56.95	5.159	0		
8,000.00	7,700.76	7,910.53	7,699.78	30.31	29.04	-83.49	293.84	236.57	57.27	5.131	0		
8,043.39	7,744.14	7,953.90	7,743.14	30.45	29.18	-83.50	293.83	236.29	57.54	5.107	0		
8,050.00	7,750.76	7,960.50	7,749.75	30.47	29.20	-83.50	293.83	236.25	57.58	5.103	0		
8,100.00	7,800.76	8,010.43	7,799.67	30.62	29.36	-83.51	293.84	235.95	57.89	5.076	0		
8,150.00	7,850.76	8,060.33	7,849.58	30.78	29.52	-83.50	293.86	235.66	58.20	5.049	0		
8,200.00	7,900.76	8,110.24	7,899.48	30.93	29.67	-83.50	293.90	235.38	58.52	5.023	0		
8,250.00	7,950.76	8,160.59	7,949.83	31.09	29.83	-83.51	293.92	235.09	58.83	4.996	0		
8,300.00	8,000.76	8,210.99	8,000.24	31.25	29.99	-83.52	293.87	234.72	59.15	4.968	0		
8,350.00	8,050.76	8,260.70	8,049.95	31.40	30.16	-83.53	293.82	234.35	59.47	4.941	0		
8,382.77	8,083.53	8,293.28	8,082.53	31.51	30.26	-83.52	293.81	234.13	59.67	4.924	0		
8,400.00	8,100.76	8,310.44	8,099.69	31.56	30.32	-83.52	293.81	234.03	59.78	4.915	0		
8,450.00	8,150.76	8,360.48	8,149.73	31.72	30.48	-83.52	293.82	233.72	60.10	4.889	0		
8,500.00	8,200.76	8,410.46	8,199.71	31.88	30.64	-83.53	293.82	233.40	60.42	4.863	0		
8,550.00	8,250.76	8,460.21	8,249.46	32.03	30.79	-83.56	293.85	233.12	60.73	4.838	0		
8,600.00	8,300.76	8,509.62	8,298.87	32.19	30.95	-83.62	293.93	232.88	61.05	4.815	0		
8,650.00	8,350.76	8,558.26	8,347.50	32.35	31.10	-83.74	294.20	232.83	61.36	4.794	0		
8,700.00	8,400.76	8,606.82	8,396.05	32.51	31.26	-83.95	294.70	233.02	61.68	4.778	0		
8,750.00	8,450.76	8,655.24	8,444.43	32.67	31.41	-84.24	295.47	233.47	61.99	4.766	0		
8,800.00	8,500.76	8,704.14	8,493.29	32.83	31.56	-84.62	296.49	234.18	62.31	4.758	0		
8,850.00	8,550.76	8,753.77	8,542.84	32.98	31.71	-85.10	297.61	234.98	62.63	4.752	0		
8,900.00	8,600.76	8,805.25	8,594.23	33.14	31.88	-85.67	298.74	235.78	62.96	4.745	0		
8,950.00	8,650.76	8,858.77	8,647.67	33.30	32.04	-86.17	299.38	236.08	63.30	4.729	0		
9,000.00	8,700.76	8,910.55	8,699.42	33.46	32.21	-86.52	299.54	235.90	63.63	4.707	0		
9,050.00	8,750.76	8,961.65	8,750.52	33.62	32.38	-86.67	299.50	235.54	63.96	4.682	0		
9,100.00	8,800.76	9,011.72	8,800.58	33.78	32.55	-86.69	299.36	235.07	64.29	4.656	0		
9,150.00	8,850.76	9,061.61	8,850.47	33.94	32.71	-86.70	299.23	234.61	64.62	4.631	0		
9,200.00	8,900.76	9,111.13	8,900.00	34.10	32.87	-86.71	299.15	234.21	64.94	4.607	0		
9,224.43	8,925.19	9,135.32	8,924.19	34.18	32.95	-86.71	299.14	234.04	65.09	4.595	0		
9,250.00	8,950.76	9,160.66	8,949.52	34.26	33.04	-86.70	299.15	233.89	65.26	4.584	0		
9,300.00	9,000.76	9,210.70	8,999.57	34.43	33.20	-86.70	299.18	233.61	65.58	4.562	0		
9,350.00	9,050.76	9,260.73	9,049.59	34.59	33.36	-86.69	299.21	233.32	65.90	4.541	0		
9,400.00	9,100.76	9,310.65	9,099.52	34.75	33.52	-86.68	299.25	233.03	66.22	4.519	0		
9,450.00	9,150.76	9,360.60	9,149.46	34.91	33.68	-86.69	299.29	232.76	66.53	4.498	0		
9,500.00	9,200.76	9,410.60	9,199.47	35.07	33.83	-86.69	299.34	232.49	66.86	4.477	0		

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H												Offset Well Error:	0.00 usft
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
9,550.00	9,250.76	9,460.63	9,249.49	35.23	33.99	-86.69	299.39	232.21	67.18	4.457	0		
9,600.00	9,300.76	9,510.69	9,299.56	35.39	34.15	-86.69	299.43	231.93	67.50	4.436	0		
9,650.00	9,350.76	9,560.61	9,349.47	35.56	34.32	-86.68	299.46	231.64	67.82	4.416	0		
9,700.00	9,400.76	9,610.34	9,399.21	35.72	34.48	-86.67	299.53	231.39	68.14	4.396	0		
9,750.00	9,450.76	9,660.29	9,449.16	35.88	34.64	-86.67	299.64	231.18	68.46	4.377	0		
9,800.00	9,500.76	9,710.42	9,499.29	36.04	34.80	-86.67	299.73	230.94	68.78	4.358	0		
9,850.00	9,550.76	9,760.40	9,549.26	36.21	34.96	-86.68	299.80	230.70	69.11	4.338	0		
9,900.00	9,600.76	9,810.29	9,599.16	36.37	35.12	-86.69	299.89	230.46	69.43	4.319	0		
9,950.00	9,650.76	9,859.48	9,648.35	36.53	35.27	-86.71	300.05	230.30	69.75	4.302	0		
10,000.00	9,700.76	9,908.45	9,697.31	36.70	35.43	-86.76	300.37	230.30	70.07	4.287	0		
10,050.00	9,750.76	9,956.96	9,745.82	36.86	35.59	-86.85	300.89	230.50	70.39	4.274	0		
10,100.00	9,800.76	10,005.37	9,794.22	37.02	35.74	-86.94	301.68	230.97	70.71	4.266	0		
10,150.00	9,850.76	10,055.84	9,844.68	37.19	35.90	-87.05	302.58	231.54	71.04	4.259	0		
10,200.00	9,900.76	10,106.65	9,895.47	37.35	36.07	-87.18	303.35	231.98	71.37	4.251	0		
10,250.00	9,950.76	10,158.80	9,947.62	37.51	36.23	-87.28	303.88	232.18	71.70	4.238	0		
10,300.00	10,000.76	10,210.67	9,999.49	37.68	36.40	-87.30	304.06	232.03	72.03	4.221	0		
10,350.00	10,050.76	10,261.10	10,049.92	37.84	36.57	-87.30	304.07	231.71	72.36	4.202	0		
10,400.00	10,100.76	10,311.21	10,100.03	38.01	36.73	-87.33	304.02	231.32	72.69	4.182	0		
10,424.72	10,125.48	10,335.66	10,124.48	38.09	36.82	-87.34	304.01	231.15	72.86	4.173	0		
10,450.00	10,150.76	10,360.66	10,149.48	38.17	36.90	-87.36	304.02	230.99	73.02	4.163	0		
10,500.00	10,200.76	10,410.39	10,199.21	38.34	37.06	-87.38	304.10	230.75	73.35	4.146	0		
10,550.00	10,250.76	10,460.51	10,249.33	38.50	37.22	-87.39	304.18	230.50	73.68	4.128	0		
10,600.00	10,300.76	10,510.79	10,299.61	38.66	37.39	-87.39	304.23	230.22	74.01	4.111	0		
10,650.00	10,350.76	10,561.22	10,350.04	38.83	37.56	-87.40	304.22	229.88	74.34	4.092	0		
10,700.00	10,400.76	10,611.45	10,400.27	38.99	37.72	-87.41	304.15	229.48	74.67	4.073	0		
10,750.00	10,450.76	10,661.55	10,450.37	39.16	37.89	-87.41	304.06	229.05	75.01	4.054	0		
10,800.00	10,500.76	10,711.34	10,500.15	39.33	38.06	-87.40	303.97	228.63	75.34	4.035	0		
10,850.00	10,550.76	10,761.02	10,549.84	39.49	38.23	-87.38	303.93	228.26	75.67	4.017	0		
10,900.00	10,600.76	10,811.04	10,599.85	39.66	38.40	-87.37	303.92	227.92	76.00	3.999	0		
10,950.00	10,650.76	10,861.12	10,649.94	39.82	38.56	-87.35	303.90	227.57	76.33	3.981	0		
10,989.20	10,689.96	10,900.14	10,688.96	39.95	38.69	-87.35	303.89	227.30	76.59	3.968	0		
11,000.00	10,700.76	10,910.89	10,699.70	39.99	38.73	-87.35	303.89	227.23	76.66	3.964	0		
11,050.00	10,750.76	10,960.63	10,749.45	40.15	38.90	-87.35	303.92	226.93	76.99	3.948	0		
11,100.00	10,800.76	11,010.35	10,799.17	40.32	39.06	-87.37	303.99	226.67	77.32	3.932	0		
11,150.00	10,850.76	11,060.17	10,848.98	40.49	39.22	-87.39	304.11	226.46	77.65	3.916	0		
11,200.00	10,900.76	11,110.63	10,899.45	40.65	39.39	-87.42	304.20	226.21	77.98	3.901	0		
11,250.00	10,950.76	11,160.94	10,949.76	40.82	39.56	-87.46	304.21	225.89	78.32	3.884	0		
11,300.00	11,000.76	11,210.81	10,999.63	40.99	39.72	-87.50	304.22	225.57	78.65	3.868	0		
11,350.00	11,050.76	11,260.66	11,049.47	41.15	39.89	-87.53	304.26	225.27	78.99	3.852	0		
11,400.00	11,100.76	11,310.47	11,099.29	41.32	40.05	-87.56	304.32	225.00	79.32	3.837	0		
11,450.00	11,150.76	11,360.28	11,149.10	41.49	40.22	-87.58	304.41	224.76	79.65	3.822	0		
11,500.00	11,200.76	11,410.09	11,198.90	41.65	40.38	-87.60	304.54	224.55	79.98	3.807	0		
11,550.00	11,250.76	11,460.32	11,249.13	41.82	40.55	-87.60	304.67	224.36	80.32	3.793	0		
11,600.00	11,300.76	11,510.92	11,299.73	41.99	40.71	-87.60	304.73	224.08	80.65	3.778	0		
11,618.33	11,319.09	11,529.36	11,318.17	42.05	40.78	-87.60	304.72	223.95	80.77	3.773	0		
11,650.00	11,350.76	11,559.99	11,348.80	42.15	40.88	-87.60	304.77	223.79	80.98	3.763	0		
11,700.00	11,400.76	11,609.99	11,398.80	42.32	41.04	-87.60	304.93	223.61	81.31	3.750	0		
11,750.00	11,450.76	11,659.99	11,448.80	42.49	41.21	-87.59	305.08	223.44	81.64	3.737	0		
11,800.00	11,500.76	11,675.00	11,463.82	42.66	41.26	-87.59	307.24	225.38	81.86	3.753	0		
11,850.00	11,550.76	11,675.00	11,463.82	42.82	41.26	-87.59	317.00	234.98	82.03	3.865	0		
11,900.00	11,600.76	11,675.00	11,463.82	42.99	41.26	-87.59	334.04	251.85	82.19	4.064	0		
11,950.00	11,650.76	11,675.00	11,463.82	43.16	41.26	-87.59	357.32	274.96	82.36	4.339	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design OUTRIDER 27 FED - O27F 509H - O27F 509H - O27F 509H														Offset Site Error:	0.00 usft
Survey Program: 185-XOMR2_OWSG MWD+IFR1+MS														Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance								Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Riskd Separation Factor	Probability of Collision			
12,000.00	11,700.76	11,675.00	11,463.82	43.33	41.26	-87.59	385.71	303.18	82.53	4.674	0				



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - PLAN 4												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	179.62	29.92				0		
50.00	50.00	49.00	49.00	0.04	0.06	49.78	29.86	29.77	0.10	306.702	0		
100.00	100.00	99.00	99.00	0.13	0.12	50.03	29.75	29.50	0.25	119.062	0		
150.00	150.00	149.00	149.00	0.22	0.30	50.46	29.57	29.05	0.52	57.261	0		
200.00	200.00	199.00	199.00	0.36	0.48	60.13	29.33	28.50	0.84	35.042	0		
250.00	250.00	249.00	249.00	0.54	0.66	54.21	29.11	27.91	1.20	24.352	0		
300.00	299.99	298.99	298.99	0.71	0.84	38.51	28.82	27.26	1.55	18.550	0		
350.00	349.99	348.99	348.99	0.89	1.02	11.78	28.48	26.57	1.91	14.915	0		
400.00	399.99	398.99	398.99	1.07	1.20	-26.35	28.15	25.88	2.26	12.431	0		
450.00	449.99	448.99	448.99	1.24	1.38	-42.21	27.81	25.20	2.62	10.625	0		
500.00	499.99	498.99	498.99	1.42	1.56	-50.51	27.44	24.47	2.97	9.238	0		
550.00	549.98	548.98	548.98	1.59	1.73	-56.34	27.05	23.73	3.32	8.137	0		
600.00	599.98	598.98	598.98	1.77	1.91	-61.11	26.66	22.98	3.68	7.246	0		
650.00	649.97	648.97	648.97	1.94	2.09	-64.15	26.21	22.18	4.03	6.497	0		
700.00	699.95	698.95	698.95	2.12	2.27	-67.21	25.69	21.30	4.39	5.853	0		
750.00	749.93	748.93	748.93	2.30	2.45	-70.07	25.13	20.39	4.74	5.296	0		
800.00	799.90	798.90	798.90	2.47	2.63	-74.42	24.58	19.48	5.10	4.819	0		
850.00	849.85	848.85	848.85	2.65	2.81	-80.91	24.15	18.69	5.46	4.424	0		
900.00	899.80	898.80	898.80	2.83	2.99	-87.00	23.91	18.09	5.81	4.112	0		
926.76	926.52	925.52	925.52	2.92	3.08	-90.00	23.87	17.87	6.01	3.975	0		
950.00	949.73	948.73	948.73	3.01	3.17	-92.77	23.90	17.73	6.17	3.873	0	CC	
1,000.00	999.65	998.65	998.65	3.19	3.35	-98.65	24.19	17.66	6.53	3.705	0		
1,050.00	1,049.55	1,048.55	1,048.55	3.36	3.53	-104.75	24.83	17.94	6.89	3.605	0		
1,100.00	1,099.44	1,098.44	1,098.44	3.54	3.70	-111.53	25.85	18.60	7.25	3.567	0		
1,150.00	1,149.35	1,148.35	1,148.35	3.72	3.88	-124.56	27.20	19.59	7.60	3.577	0		
1,200.00	1,199.28	1,198.28	1,198.28	3.90	4.06	-145.46	29.09	21.13	7.96	3.654	0		
1,250.00	1,249.23	1,247.74	1,247.74	4.08	4.24	-164.51	31.38	23.07	8.31	3.776	0		
1,300.00	1,299.20	1,297.11	1,297.09	4.25	4.41	167.77	34.45	25.79	8.66	3.980	0		
1,350.00	1,349.18	1,346.42	1,346.35	4.42	4.58	144.93	37.61	28.61	9.00	4.181	0		
1,400.00	1,399.17	1,395.67	1,395.52	4.59	4.74	87.30	40.88	31.55	9.33	4.380	0		
1,450.00	1,449.17	1,444.86	1,444.56	4.76	4.91	53.49	44.22	34.55	9.67	4.573	0		
1,500.00	1,499.14	1,493.97	1,493.45	4.92	5.08	53.13	47.86	37.86	10.00	4.785	0		
1,550.00	1,549.09	1,543.00	1,542.18	5.09	5.25	52.83	51.80	41.46	10.34	5.011	0		
1,600.00	1,599.00	1,591.95	1,590.73	5.26	5.42	43.70	55.85	45.19	10.67	5.236	0		
1,650.00	1,648.85	1,640.85	1,639.11	5.43	5.59	37.83	59.88	48.88	11.00	5.444	0		
1,700.00	1,698.64	1,689.69	1,687.31	5.60	5.77	33.80	63.86	52.54	11.33	5.639	0		
1,750.00	1,748.34	1,738.47	1,735.30	5.77	5.94	30.86	67.80	56.15	11.65	5.819	0		
1,800.00	1,797.95	1,787.19	1,783.08	5.94	6.11	28.62	71.71	59.73	11.98	5.988	0		
1,850.00	1,847.45	1,835.85	1,830.64	6.11	6.29	26.84	75.57	63.27	12.30	6.144	0		
1,900.00	1,896.82	1,884.45	1,877.96	6.29	6.46	25.37	79.39	66.77	12.62	6.291	0		
1,950.00	1,946.05	1,933.00	1,925.03	6.46	6.64	24.12	83.17	70.23	12.94	6.427	0		
2,000.00	1,995.12	1,981.88	1,972.22	6.63	6.81	23.04	86.87	73.61	13.26	6.552	0		
2,050.00	2,044.02	2,031.79	2,020.34	6.80	7.00	22.19	89.93	76.34	13.58	6.620	0		
2,100.00	2,092.73	2,081.74	2,068.51	6.98	7.18	21.59	92.14	78.24	13.90	6.628	0		
2,150.00	2,141.24	2,131.72	2,116.70	7.15	7.37	21.21	93.50	79.28	14.22	6.576	0		
2,200.00	2,189.53	2,181.71	2,164.91	7.33	7.55	21.02	94.01	79.47	14.54	6.466	0		
2,250.00	2,237.60	2,231.70	2,213.12	7.51	7.74	21.02	93.68	78.82	14.86	6.305	0		
2,300.00	2,285.41	2,281.68	2,261.31	7.69	7.93	21.21	92.51	77.33	15.18	6.095	0		
2,350.00	2,332.97	2,331.63	2,309.47	7.87	8.12	21.60	90.51	75.01	15.50	5.840	0		
2,400.00	2,380.25	2,381.52	2,357.59	8.05	8.30	22.23	87.68	71.87	15.82	5.544	0		
2,450.00	2,427.24	2,431.36	2,405.65	8.24	8.49	23.14	84.05	67.91	16.14	5.208	0		
2,500.00	2,473.96	2,481.13	2,453.64	8.42	8.68	24.46	79.71	63.22	16.49	4.835	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													OUTRIDER 27 FED - O27F 509H - O27F 509H - PLAN 4		Offset Site Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis		Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision				
2,550.00	2,520.63	2,530.89	2,501.62	8.61	8.87	26.11	75.30	58.43	16.88	4.462	0					
2,600.00	2,567.30	2,580.64	2,549.59	8.80	9.06	27.97	70.96	53.70	17.27	4.109	0					
2,650.00	2,613.97	2,630.40	2,597.57	8.99	9.25	30.06	66.71	49.04	17.67	3.776	0					
2,700.00	2,660.64	2,680.15	2,645.55	9.18	9.45	32.44	62.55	44.48	18.07	3.461	0					
2,750.00	2,707.32	2,729.91	2,693.53	9.38	9.64	35.15	58.52	40.04	18.48	3.166	0					
2,800.00	2,753.99	2,779.66	2,741.51	9.57	9.83	38.25	54.64	35.74	18.90	2.891	0					
2,850.00	2,800.66	2,829.42	2,789.49	9.77	10.02	41.81	50.94	31.61	19.33	2.635	0					
2,900.00	2,847.33	2,879.17	2,837.46	9.97	10.22	45.91	47.47	27.70	19.77	2.401	0					
2,950.00	2,894.00	2,928.93	2,885.44	10.17	10.41	50.62	44.28	24.06	20.22	2.190	0					
3,000.00	2,940.67	2,978.68	2,933.42	10.37	10.60	56.01	41.43	20.75	20.68	2.004	0					
3,050.00	2,987.34	3,028.44	2,981.40	10.57	10.80	62.14	39.00	17.86	21.14	1.845	0					
3,100.00	3,034.01	3,078.19	3,029.38	10.77	10.99	68.97	37.08	15.47	21.61	1.716	0					
3,150.00	3,080.68	3,127.95	3,077.36	10.97	11.18	76.43	35.74	13.67	22.08	1.619	0					
3,200.00	3,127.35	3,177.70	3,125.33	11.17	11.38	84.32	35.05	12.53	22.52	1.556	0					
3,224.90	3,150.59	3,202.48	3,149.23	11.28	11.48	88.33	34.97	12.23	22.74	1.538	0					
3,250.00	3,174.02	3,227.46	3,173.31	11.38	11.57	92.36	35.05	12.11	22.95	1.528	0	ES, SF				
3,300.00	3,220.69	3,277.21	3,221.29	11.58	11.77	100.25	35.74	12.40	23.34	1.531	0					
3,350.00	3,267.36	3,326.97	3,269.27	11.79	11.96	107.71	37.09	13.37	23.72	1.564	0					
3,400.00	3,314.03	3,376.72	3,317.25	11.99	12.16	114.54	39.01	14.94	24.07	1.621	0					
3,450.00	3,360.70	3,426.48	3,365.22	12.20	12.36	120.66	41.44	17.02	24.42	1.697	0					
3,500.00	3,407.37	3,476.24	3,413.20	12.41	12.55	126.05	44.29	19.53	24.76	1.789	0					
3,550.00	3,454.05	3,525.99	3,461.18	12.62	12.75	130.76	47.48	22.37	25.11	1.891	0					
3,600.00	3,500.72	3,575.75	3,509.16	12.82	12.94	134.86	50.96	25.49	25.46	2.001	0					
3,650.00	3,547.39	3,625.50	3,557.14	13.03	13.14	138.42	54.66	28.84	25.82	2.117	0					
3,700.00	3,594.06	3,675.26	3,605.12	13.24	13.34	141.51	58.54	32.36	26.18	2.236	0					
3,750.00	3,640.73	3,725.01	3,653.09	13.45	13.53	144.22	62.57	36.02	26.55	2.357	0					
3,800.00	3,687.40	3,774.77	3,701.07	13.66	13.73	146.60	66.73	39.80	26.92	2.478	0					
3,850.00	3,734.07	3,824.52	3,749.05	13.87	13.93	148.69	70.98	43.68	27.30	2.600	0					
3,900.00	3,780.74	3,874.28	3,797.03	14.08	14.12	150.55	75.32	47.64	27.68	2.721	0					
3,950.00	3,827.41	3,924.03	3,845.01	14.29	14.32	152.20	79.73	51.66	28.07	2.841	0					
4,000.00	3,874.08	3,973.79	3,892.99	14.51	14.52	153.68	84.20	55.74	28.46	2.959	0					
4,050.00	3,920.75	4,023.54	3,940.96	14.72	14.72	155.01	88.72	59.87	28.85	3.075	0					
4,100.00	3,967.42	4,073.30	3,988.94	14.93	14.91	156.21	93.28	64.04	29.24	3.190	0					
4,150.00	4,014.09	4,123.05	4,036.92	15.14	15.11	157.30	97.88	68.24	29.63	3.303	0					
4,200.00	4,060.76	4,172.81	4,084.90	15.36	15.31	158.29	102.51	72.48	30.03	3.413	0					
4,250.00	4,107.43	4,222.56	4,132.88	15.57	15.51	159.20	107.16	76.73	30.43	3.522	0					
4,300.00	4,154.10	4,272.32	4,180.86	15.78	15.71	160.03	111.85	81.02	30.83	3.628	0					
4,350.00	4,200.78	4,322.07	4,228.83	16.00	15.90	160.79	116.55	85.32	31.23	3.732	0					
4,400.00	4,247.45	4,371.83	4,276.81	16.21	16.10	161.49	121.27	89.64	31.63	3.834	0					
4,450.00	4,294.12	4,421.59	4,324.79	16.42	16.30	162.14	126.01	93.98	32.03	3.934	0					
4,500.00	4,340.79	4,471.34	4,372.77	16.64	16.50	162.75	130.76	98.33	32.44	4.031	0					
4,550.00	4,387.46	4,521.10	4,420.75	16.85	16.70	163.31	135.53	102.69	32.84	4.127	0					
4,600.00	4,434.13	4,570.85	4,468.72	17.07	16.90	163.83	140.31	107.07	33.25	4.220	0					
4,650.00	4,480.80	4,620.61	4,516.70	17.28	17.09	164.32	145.10	111.45	33.65	4.312	0					
4,700.00	4,527.47	4,670.36	4,564.68	17.50	17.29	164.77	149.90	115.84	34.06	4.401	0					
4,750.00	4,574.14	4,720.12	4,612.66	17.71	17.49	165.20	154.71	120.25	34.46	4.489	0					
4,800.00	4,620.81	4,769.87	4,660.64	17.93	17.69	165.61	159.53	124.66	34.87	4.575	0					
4,850.00	4,667.48	4,819.63	4,708.62	18.15	17.89	165.98	164.35	129.07	35.28	4.659	0					
4,900.00	4,714.15	4,869.38	4,756.59	18.36	18.09	166.34	169.18	133.49	35.69	4.741	0					
4,950.00	4,760.82	4,919.14	4,804.57	18.58	18.29	166.68	174.02	137.92	36.10	4.821	0					
5,000.00	4,807.49	4,968.89	4,852.55	18.79	18.49	167.00	178.86	142.36	36.51	4.900	0					
5,050.00	4,854.16	5,018.65	4,900.53	19.01	18.69	167.30	183.71	146.80	36.92	4.976	0					

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - PLAN 4												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
5,100.00	4,900.83	5,068.40	4,948.51	19.23	18.89	167.59	188.56	151.24	37.33	5.052	0		
5,150.00	4,947.50	5,118.16	4,996.49	19.45	19.08	167.86	193.42	155.69	37.74	5.126	0		
5,200.00	4,994.18	5,167.91	5,044.46	19.66	19.28	168.12	198.28	160.14	38.15	5.198	0		
5,250.00	5,040.85	5,217.67	5,092.44	19.88	19.48	168.37	203.15	164.59	38.56	5.269	0		
5,300.00	5,087.52	5,267.43	5,140.42	20.10	19.68	168.60	208.02	169.05	38.97	5.338	0		
5,350.00	5,134.19	5,317.18	5,188.40	20.31	19.88	168.83	212.89	173.51	39.38	5.406	0		
5,400.00	5,180.86	5,366.94	5,236.38	20.53	20.08	169.04	217.77	177.97	39.79	5.473	0		
5,450.00	5,227.53	5,416.69	5,284.36	20.75	20.28	169.25	222.64	182.44	40.20	5.538	0		
5,500.00	5,274.20	5,466.45	5,332.33	20.97	20.48	169.44	227.52	186.91	40.62	5.602	0		
5,550.00	5,320.87	5,516.20	5,380.31	21.19	20.68	169.63	232.41	191.38	41.03	5.665	0		
5,600.00	5,367.54	5,565.96	5,428.29	21.40	20.88	169.81	237.29	195.85	41.44	5.726	0		
5,650.00	5,414.21	5,615.71	5,476.27	21.62	21.08	169.99	242.18	200.33	41.85	5.786	0		
5,700.00	5,460.88	5,665.47	5,524.25	21.84	21.28	170.15	247.07	204.81	42.27	5.846	0		
5,750.00	5,507.55	5,715.22	5,572.23	22.06	21.48	170.31	251.96	209.28	42.68	5.904	0		
5,800.00	5,554.22	5,764.98	5,620.20	22.28	21.68	170.47	256.86	213.76	43.09	5.961	0		
5,850.00	5,600.89	5,814.73	5,668.18	22.49	21.88	170.61	261.75	218.25	43.51	6.016	0		
5,900.00	5,647.56	5,864.49	5,716.16	22.71	22.08	170.76	266.65	222.73	43.92	6.071	0		
5,950.00	5,694.23	5,914.24	5,764.14	22.93	22.28	170.89	271.55	227.22	44.33	6.125	0		
6,000.00	5,740.91	5,964.00	5,812.12	23.15	22.48	171.03	276.45	231.70	44.75	6.178	0		
6,050.00	5,787.58	6,013.75	5,860.09	23.37	22.68	171.15	281.35	236.19	45.16	6.230	0		
6,100.00	5,834.25	6,063.51	5,908.07	23.59	22.88	171.28	286.26	240.68	45.58	6.281	0		
6,150.00	5,880.92	6,113.26	5,956.05	23.81	23.08	171.40	291.16	245.17	45.99	6.331	0		
6,200.00	5,927.59	6,163.02	6,004.03	24.03	23.28	171.51	296.07	249.66	46.41	6.380	0		
6,250.00	5,974.26	6,212.78	6,052.01	24.25	23.48	171.62	300.97	254.15	46.82	6.428	0		
6,300.00	6,021.08	6,262.57	6,100.02	24.46	23.68	171.73	305.47	258.16	47.31	6.457	0		
6,350.00	6,068.20	6,312.44	6,148.11	24.68	23.88	171.81	309.10	261.31	47.79	6.468	0		
6,400.00	6,115.60	6,362.36	6,196.25	24.89	24.08	171.87	311.87	263.62	48.25	6.463	0		
6,450.00	6,163.27	6,412.32	6,244.43	25.10	24.28	171.90	313.78	265.08	48.70	6.443	0		
6,500.00	6,211.20	6,462.31	6,292.63	25.30	24.48	171.90	314.83	265.69	49.14	6.407	0		
6,550.00	6,259.37	6,512.31	6,340.84	25.51	24.69	171.88	315.01	265.45	49.56	6.356	0		
6,600.00	6,307.77	6,561.30	6,388.08	25.71	24.88	171.83	314.34	264.38	49.96	6.291	0		
6,650.00	6,356.38	6,606.41	6,431.72	25.90	25.06	171.78	313.35	263.01	50.33	6.225	0		
6,700.00	6,405.18	6,651.53	6,475.53	26.10	25.24	171.73	312.26	261.57	50.69	6.161	0		
6,750.00	6,454.17	6,700.00	6,522.78	26.28	25.43	171.68	311.11	260.08	51.04	6.096	0		
6,800.00	6,503.33	6,741.81	6,563.68	26.47	25.59	171.63	309.84	258.50	51.34	6.035	0		
6,850.00	6,552.63	6,786.98	6,608.00	26.65	25.76	171.57	308.50	256.86	51.64	5.974	0		
6,900.00	6,602.08	6,832.16	6,652.47	26.84	25.93	171.52	307.08	255.16	51.92	5.914	0		
6,950.00	6,651.64	6,877.37	6,697.08	27.01	26.10	171.46	305.57	253.39	52.19	5.855	0		
7,000.00	6,701.32	6,922.59	6,741.82	27.19	26.27	171.40	303.98	251.55	52.44	5.797	0		
7,050.00	6,751.08	6,967.84	6,786.67	27.36	26.43	171.34	302.31	249.65	52.66	5.740	0		
7,100.00	6,800.93	7,013.10	6,831.64	27.53	26.60	171.28	300.56	247.68	52.88	5.684	0		
7,150.00	6,850.83	7,058.40	6,876.71	27.69	26.76	171.21	298.72	245.65	53.07	5.629	0		
7,200.00	6,900.78	7,100.00	6,918.17	27.86	26.90	171.15	296.82	243.59	53.23	5.576	0		
7,250.00	6,950.76	7,149.05	6,967.10	28.01	27.07	171.08	294.80	241.40	53.40	5.521	0		
7,300.00	7,000.76	7,194.42	7,012.41	28.17	27.23	171.01	292.71	239.18	53.54	5.468	0		
7,350.00	7,050.76	7,239.83	7,057.79	28.32	27.38	-90.58	290.95	237.11	53.83	5.405	0		
7,400.00	7,100.76	7,285.28	7,103.23	28.47	27.53	-90.61	289.96	235.82	54.13	5.356	0		
7,450.00	7,150.76	7,331.81	7,149.76	28.62	27.68	-90.61	289.73	235.30	54.43	5.323	0		
7,500.00	7,200.76	7,381.81	7,199.76	28.77	27.84	-90.61	289.73	234.99	54.74	5.293	0		
7,550.00	7,250.76	7,431.81	7,249.76	28.93	28.00	-90.61	289.73	234.68	55.04	5.264	0		
7,600.00	7,300.76	7,481.81	7,299.76	29.08	28.16	-90.61	289.73	234.38	55.35	5.234	0		
7,650.00	7,350.76	7,531.81	7,349.76	29.23	28.32	-90.61	289.73	234.07	55.66	5.205	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - PLAN 4												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
7,700.00	7,400.76	7,581.81	7,399.76	29.39	28.48	-90.61	289.73	233.76	55.97	5.177	0		
7,750.00	7,450.76	7,631.81	7,449.76	29.54	28.64	-90.61	289.73	233.45	56.28	5.148	0		
7,800.00	7,500.76	7,681.81	7,499.76	29.69	28.80	-90.61	289.73	233.14	56.59	5.120	0		
7,850.00	7,550.76	7,731.81	7,549.76	29.85	28.96	-90.61	289.73	232.83	56.90	5.092	0		
7,900.00	7,600.76	7,781.81	7,599.76	30.00	29.12	-90.61	289.73	232.52	57.21	5.065	0		
7,950.00	7,650.76	7,831.81	7,649.76	30.16	29.28	-90.61	289.73	232.21	57.52	5.037	0		
8,000.00	7,700.76	7,881.81	7,699.76	30.31	29.44	-90.61	289.73	231.90	57.83	5.010	0		
8,050.00	7,750.76	7,931.81	7,749.76	30.47	29.60	-90.61	289.73	231.58	58.14	4.983	0		
8,100.00	7,800.76	7,981.81	7,799.76	30.62	29.76	-90.61	289.73	231.27	58.46	4.956	0		
8,150.00	7,850.76	8,031.81	7,849.76	30.78	29.92	-90.61	289.73	230.96	58.77	4.930	0		
8,200.00	7,900.76	8,081.81	7,899.76	30.93	30.09	-90.61	289.73	230.64	59.08	4.904	0		
8,250.00	7,950.76	8,131.81	7,949.76	31.09	30.25	-90.61	289.73	230.33	59.40	4.878	0		
8,300.00	8,000.76	8,181.81	7,999.76	31.25	30.41	-90.61	289.73	230.01	59.71	4.852	0		
8,350.00	8,050.76	8,231.81	8,049.76	31.40	30.57	-90.61	289.73	229.70	60.03	4.827	0		
8,400.00	8,100.76	8,281.81	8,099.76	31.56	30.74	-90.61	289.73	229.38	60.34	4.801	0		
8,450.00	8,150.76	8,331.81	8,149.76	31.72	30.90	-90.61	289.73	229.07	60.66	4.776	0		
8,500.00	8,200.76	8,381.81	8,199.76	31.88	31.06	-90.61	289.73	228.75	60.98	4.751	0		
8,550.00	8,250.76	8,431.81	8,249.76	32.03	31.22	-90.61	289.73	228.43	61.29	4.727	0		
8,600.00	8,300.76	8,481.81	8,299.76	32.19	31.39	-90.61	289.73	228.11	61.61	4.702	0		
8,650.00	8,350.76	8,531.81	8,349.76	32.35	31.55	-90.61	289.73	227.80	61.93	4.678	0		
8,700.00	8,400.76	8,581.81	8,399.76	32.51	31.71	-90.61	289.73	227.48	62.25	4.654	0		
8,750.00	8,450.76	8,631.81	8,449.76	32.67	31.88	-90.61	289.73	227.16	62.57	4.631	0		
8,800.00	8,500.76	8,681.81	8,499.76	32.83	32.04	-90.61	289.73	226.84	62.89	4.607	0		
8,850.00	8,550.76	8,731.81	8,549.76	32.98	32.21	-90.61	289.73	226.52	63.21	4.584	0		
8,900.00	8,600.76	8,781.81	8,599.76	33.14	32.37	-90.61	289.73	226.20	63.53	4.561	0		
8,950.00	8,650.76	8,831.81	8,649.76	33.30	32.54	-90.61	289.73	225.88	63.85	4.538	0		
9,000.00	8,700.76	8,881.81	8,699.76	33.46	32.70	-90.61	289.73	225.56	64.17	4.515	0		
9,050.00	8,750.76	8,931.81	8,749.76	33.62	32.86	-90.61	289.73	225.24	64.49	4.492	0		
9,100.00	8,800.76	8,981.81	8,799.76	33.78	33.03	-90.61	289.73	224.91	64.81	4.470	0		
9,150.00	8,850.76	9,031.81	8,849.76	33.94	33.19	-90.61	289.73	224.59	65.14	4.448	0		
9,200.00	8,900.76	9,081.81	8,899.76	34.10	33.36	-90.61	289.73	224.27	65.46	4.426	0		
9,250.00	8,950.76	9,131.81	8,949.76	34.26	33.53	-90.61	289.73	223.95	65.78	4.404	0		
9,300.00	9,000.76	9,181.81	8,999.76	34.43	33.69	-90.61	289.73	223.62	66.10	4.383	0		
9,350.00	9,050.76	9,231.81	9,049.76	34.59	33.86	-90.61	289.73	223.30	66.43	4.361	0		
9,400.00	9,100.76	9,281.81	9,099.76	34.75	34.02	-90.61	289.73	222.97	66.75	4.340	0		
9,450.00	9,150.76	9,331.81	9,149.76	34.91	34.19	-90.61	289.73	222.65	67.08	4.319	0		
9,500.00	9,200.76	9,381.81	9,199.76	35.07	34.35	-90.61	289.73	222.33	67.40	4.299	0		
9,550.00	9,250.76	9,431.81	9,249.76	35.23	34.52	-90.61	289.73	222.00	67.73	4.278	0		
9,600.00	9,300.76	9,481.81	9,299.76	35.39	34.69	-90.61	289.73	221.67	68.05	4.257	0		
9,650.00	9,350.76	9,531.81	9,349.76	35.56	34.85	-90.61	289.73	221.35	68.38	4.237	0		
9,700.00	9,400.76	9,581.81	9,399.76	35.72	35.02	-90.61	289.73	221.02	68.70	4.217	0		
9,750.00	9,450.76	9,631.81	9,449.76	35.88	35.19	-90.61	289.73	220.70	69.03	4.197	0		
9,800.00	9,500.76	9,681.81	9,499.76	36.04	35.35	-90.61	289.73	220.37	69.36	4.177	0		
9,850.00	9,550.76	9,731.81	9,549.76	36.21	35.52	-90.61	289.73	220.04	69.68	4.158	0		
9,900.00	9,600.76	9,781.81	9,599.76	36.37	35.69	-90.61	289.73	219.72	70.01	4.138	0		
9,950.00	9,650.76	9,831.81	9,649.76	36.53	35.86	-90.61	289.73	219.39	70.34	4.119	0		
10,000.00	9,700.76	9,881.81	9,699.76	36.70	36.02	-90.61	289.73	219.06	70.67	4.100	0		
10,050.00	9,750.76	9,931.81	9,749.76	36.86	36.19	-90.61	289.73	218.73	71.00	4.081	0		
10,100.00	9,800.76	9,981.81	9,799.76	37.02	36.36	-90.61	289.73	218.40	71.32	4.062	0		
10,150.00	9,850.76	10,031.81	9,849.76	37.19	36.53	-90.61	289.73	218.07	71.65	4.043	0		
10,200.00	9,900.76	10,081.81	9,899.76	37.35	36.69	-90.61	289.73	217.74	71.98	4.025	0		
10,250.00	9,950.76	10,131.81	9,949.76	37.51	36.86	-90.61	289.73	217.41	72.31	4.007	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 509H - O27F 509H - PLAN 4													Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision		
10,300.00	10,000.76	10,181.81	9,999.76	37.68	37.03	-90.61	289.73	217.09	72.64	3.988	0			
10,350.00	10,050.76	10,231.81	10,049.76	37.84	37.20	-90.61	289.73	216.76	72.97	3.970	0			
10,400.00	10,100.76	10,281.81	10,099.76	38.01	37.37	-90.61	289.73	216.43	73.30	3.953	0			
10,450.00	10,150.76	10,331.81	10,149.76	38.17	37.53	-90.61	289.73	216.09	73.63	3.935	0			
10,500.00	10,200.76	10,381.81	10,199.76	38.34	37.70	-90.61	289.73	215.76	73.96	3.917	0			
10,550.00	10,250.76	10,431.81	10,249.76	38.50	37.87	-90.61	289.73	215.43	74.29	3.900	0			
10,600.00	10,300.76	10,481.81	10,299.76	38.66	38.04	-90.61	289.73	215.10	74.63	3.882	0			
10,650.00	10,350.76	10,531.81	10,349.76	38.83	38.21	-90.61	289.73	214.77	74.96	3.865	0			
10,700.00	10,400.76	10,581.81	10,399.76	38.99	38.38	-90.61	289.73	214.44	75.29	3.848	0			
10,750.00	10,450.76	10,631.81	10,449.76	39.16	38.55	-90.61	289.73	214.11	75.62	3.831	0			
10,800.00	10,500.76	10,681.81	10,499.76	39.33	38.72	-90.61	289.73	213.77	75.95	3.815	0			
10,850.00	10,550.76	10,731.81	10,549.76	39.49	38.89	-90.61	289.73	213.44	76.29	3.798	0			
10,900.00	10,600.76	10,781.81	10,599.76	39.66	39.05	-90.61	289.73	213.11	76.62	3.781	0			
10,950.00	10,650.76	10,831.81	10,649.76	39.82	39.22	-90.61	289.73	212.78	76.95	3.765	0			
11,000.00	10,700.76	10,881.81	10,699.76	39.99	39.39	-90.61	289.73	212.44	77.28	3.749	0			
11,050.00	10,750.76	10,931.81	10,749.76	40.15	39.56	-90.61	289.73	212.11	77.62	3.733	0			
11,100.00	10,800.76	10,981.81	10,799.76	40.32	39.73	-90.61	289.73	211.78	77.95	3.717	0			
11,150.00	10,850.76	11,031.81	10,849.76	40.49	39.90	-90.61	289.73	211.44	78.29	3.701	0			
11,200.00	10,900.76	11,081.81	10,899.76	40.65	40.07	-90.61	289.73	211.11	78.62	3.685	0			
11,250.00	10,950.76	11,131.81	10,949.76	40.82	40.24	-90.61	289.73	210.77	78.95	3.670	0			
11,300.00	11,000.76	11,181.81	10,999.76	40.99	40.41	-90.61	289.73	210.44	79.29	3.654	0			
11,350.00	11,050.76	11,231.81	11,049.76	41.15	40.58	-90.61	289.73	210.10	79.62	3.639	0			
11,400.00	11,100.76	11,281.81	11,099.76	41.32	40.75	-90.61	289.73	209.77	79.96	3.623	0			
11,450.00	11,150.76	11,331.81	11,149.76	41.49	40.92	-90.61	289.73	209.43	80.29	3.608	0			
11,500.00	11,200.76	11,381.81	11,199.76	41.65	41.09	-90.61	289.73	209.10	80.63	3.593	0			
11,550.00	11,250.76	11,431.81	11,249.76	41.82	41.26	-90.61	289.73	208.76	80.96	3.578	0			
11,600.00	11,300.76	11,481.81	11,299.76	41.99	41.43	-90.61	289.73	208.43	81.30	3.564	0			
11,650.00	11,350.76	11,531.81	11,349.76	42.15	41.60	-90.61	289.73	208.09	81.64	3.549	0			
11,700.00	11,400.76	11,581.81	11,399.76	42.32	41.77	-90.61	289.73	207.76	81.97	3.534	0			
11,750.00	11,450.76	11,631.81	11,449.76	42.49	41.95	-90.61	289.73	207.42	82.31	3.520	0			
11,800.00	11,500.76	11,681.81	11,499.76	42.66	42.12	-90.61	289.73	207.08	82.64	3.506	0			
11,850.00	11,550.76	11,731.81	11,549.76	42.82	42.29	-90.61	289.73	206.75	82.98	3.491	0			
11,900.00	11,600.76	11,781.81	11,599.76	42.99	42.46	-90.61	289.73	206.41	83.32	3.477	0			
11,950.00	11,650.76	11,831.81	11,649.76	43.16	42.63	-90.61	289.73	206.07	83.66	3.463	0			
12,000.00	11,700.76	11,881.81	11,699.76	43.33	42.80	-90.38	289.72	205.74	83.99	3.450	0			

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - O27F 510H												Offset Well Error:	0.00 usft
Survey Program: 180-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-0.19	30.02				0		
50.00	50.00	48.98	48.98	0.04	0.07	-130.21	30.06	29.95	0.11	275.559	0		ES
100.00	100.00	98.95	98.95	0.13	0.15	-130.50	30.23	29.96	0.27	110.529	0		
150.00	150.00	148.92	148.92	0.22	0.22	-130.98	30.52	30.08	0.44	69.674	0		
200.00	200.00	198.89	198.89	0.36	0.34	-122.61	30.91	30.21	0.69	44.552	0		
250.00	250.00	248.86	248.86	0.54	0.52	-130.20	31.35	30.30	1.05	29.815	0		
300.00	299.99	298.82	298.82	0.71	0.69	-147.31	31.92	30.51	1.41	22.645	0		
350.00	349.99	348.81	348.81	0.89	0.87	-175.13	32.56	30.79	1.76	18.451	0		
400.00	399.99	398.82	398.81	1.07	1.05	146.17	33.15	31.03	2.12	15.649	0		
450.00	449.99	448.79	448.78	1.24	1.23	130.22	33.73	31.26	2.47	13.653	0		
500.00	499.99	498.76	498.75	1.42	1.41	122.22	34.38	31.55	2.82	12.178	0		
550.00	549.98	548.80	548.77	1.59	1.59	116.93	35.03	31.85	3.18	11.030	0		
600.00	599.98	598.83	598.79	1.77	1.76	112.77	35.63	32.10	3.53	10.097	0		
650.00	649.97	648.89	648.82	1.94	1.94	110.70	36.22	32.34	3.88	9.328	0		
700.00	699.95	698.93	698.83	2.12	2.12	109.24	36.82	32.58	4.24	8.690	0		
750.00	749.93	748.92	748.78	2.30	2.30	108.79	37.50	32.90	4.59	8.165	0		
800.00	799.90	798.90	798.72	2.47	2.48	107.84	38.27	33.32	4.95	7.734	0		
850.00	849.85	848.87	848.65	2.65	2.66	106.05	39.11	33.80	5.30	7.373	0		
900.00	899.80	898.75	898.49	2.83	2.84	106.08	40.03	34.37	5.66	7.072	0		
950.00	949.73	948.49	948.21	3.01	3.01	107.87	41.29	35.27	6.02	6.863	0		
1,000.00	999.65	998.37	998.08	3.19	3.19	110.71	42.93	36.55	6.37	6.736	0		
1,050.00	1,049.55	1,048.41	1,048.08	3.36	3.37	113.59	44.71	37.98	6.73	6.643	0		SF
1,100.00	1,099.44	1,062.00	1,061.67	3.54	3.42	114.36	59.08	52.12	6.96	8.491	0		
1,150.00	1,149.35	1,062.00	1,061.67	3.72	3.42	107.59	98.90	91.76	7.14	13.858	0		
1,200.00	1,199.28	1,062.00	1,061.67	3.90	3.42	91.31	144.92	137.60	7.31	19.811	0		
1,250.00	1,249.23	1,062.00	1,061.67	4.08	3.42	76.71	192.76	185.27	7.49	25.739	0		
1,300.00	1,299.20	1,062.00	1,061.67	4.25	3.42	52.79	241.32	233.66	7.66	31.495	0		
1,350.00	1,349.18	1,062.00	1,061.67	4.42	3.42	34.93	290.36	282.53	7.83	37.076	0		
1,400.00	1,399.17	1,062.00	1,061.67	4.59	3.42	-17.22	339.64	331.64	8.00	42.452	0		
1,450.00	1,449.17	1,062.00	1,061.67	4.76	3.42	-45.75	389.17	381.01	8.17	47.652	0		
1,500.00	1,499.14	1,062.00	1,061.67	4.92	3.42	-40.47	438.76	430.43	8.33	52.668	0		
1,550.00	1,549.09	1,062.00	1,061.67	5.09	3.42	-36.02	488.36	479.86	8.49	57.499	0		
1,600.00	1,599.00	1,062.00	1,061.67	5.26	3.42	-37.82	537.97	529.32	8.66	62.145	0		
1,650.00	1,648.85	1,062.00	1,061.67	5.43	3.42	-36.33	587.62	578.81	8.82	66.631	0		
1,700.00	1,698.64	1,062.00	1,061.67	5.60	3.42	-33.34	637.28	628.30	8.98	70.974	0		
1,750.00	1,748.34	1,062.00	1,061.67	5.77	3.42	-29.83	686.94	677.80	9.14	75.173	0		
1,800.00	1,797.95	1,062.00	1,061.67	5.94	3.42	-26.32	736.57	727.28	9.29	79.249	0		
1,850.00	1,847.45	1,062.00	1,061.67	6.11	3.42	-23.08	786.18	776.73	9.45	83.195	0		
1,900.00	1,896.82	1,062.00	1,061.67	6.29	3.42	-20.19	835.74	826.14	9.60	87.033	0		
1,950.00	1,946.05	1,062.00	1,061.67	6.46	3.42	-17.67	885.27	875.51	9.76	90.749	0		
2,000.00	1,995.12	1,062.00	1,061.67	6.63	3.42	-15.50	934.74	924.83	9.90	94.374	0		
2,050.00	2,044.02	1,062.00	1,061.67	6.80	3.42	-13.63	984.15	974.10	10.06	97.854	0		
2,100.00	2,092.73	1,062.00	1,061.67	6.98	3.42	-12.02	1,033.50	1,023.30	10.20	101.314	0		
2,150.00	2,141.24	1,062.00	1,061.67	7.15	3.42	-10.64	1,082.79	1,072.44	10.34	104.668	0		
2,200.00	2,189.53	1,062.00	1,061.67	7.33	3.42	-9.44	1,131.99	1,121.50	10.49	107.886	0		
2,250.00	2,237.60	1,062.00	1,061.67	7.51	3.42	-8.41	1,181.12	1,170.49	10.64	111.047	0		
2,300.00	2,285.41	1,062.00	1,061.67	7.69	3.42	-7.50	1,230.17	1,219.39	10.78	114.121	0		
2,350.00	2,332.97	1,062.00	1,061.67	7.87	3.42	-6.72	1,279.13	1,268.20	10.92	117.118	0		
2,400.00	2,380.25	1,062.00	1,061.67	8.05	3.42	-6.03	1,327.99	1,316.93	11.06	120.041	0		
2,450.00	2,427.24	1,062.00	1,061.67	8.24	3.42	-5.42	1,376.76	1,365.56	11.20	122.888	0		
2,500.00	2,473.96	1,062.00	1,061.67	8.42	3.42	-5.11	1,425.45	1,414.09	11.36	125.445	0		
2,550.00	2,520.63	1,062.00	1,061.67	8.61	3.42	-5.11	1,474.20	1,462.65	11.55	127.639	0		

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



GeoGuidance
Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-0.19	30.02				0		
50.00	50.00	49.00	49.00	0.04	0.06	-130.19	30.04	29.94	0.10	308.485	0		
100.00	100.00	99.00	99.00	0.13	0.12	-130.44	30.15	29.90	0.25	120.645	0		
150.00	150.00	149.00	149.00	0.22	0.30	-130.86	30.34	29.82	0.52	58.745	0		
200.00	200.00	199.00	199.00	0.36	0.48	-122.39	30.58	29.74	0.84	36.531	0		
250.00	250.00	249.00	249.00	0.54	0.66	-129.80	30.83	29.63	1.20	25.792	0		
300.00	299.99	298.99	298.99	0.71	0.84	-146.63	31.14	29.59	1.55	20.049	0		
350.00	349.99	348.99	348.99	0.89	1.02	-173.98	31.50	29.59	1.91	16.499	0		
400.00	399.99	398.99	398.99	1.07	1.20	148.12	31.82	29.56	2.26	14.055	0		
450.00	449.99	448.99	448.99	1.24	1.38	133.26	32.13	29.52	2.62	12.276	0		
500.00	499.99	498.99	498.99	1.42	1.56	126.51	32.48	29.51	2.97	10.932	0	ES	
550.00	549.98	548.98	548.98	1.59	1.73	122.74	32.85	29.52	3.32	9.880	0		
600.00	599.98	598.98	598.98	1.77	1.91	120.51	33.25	29.57	3.68	9.038	0		
650.00	649.97	648.97	648.97	1.94	2.09	120.80	33.75	29.71	4.03	8.366	0		
700.00	699.95	698.95	698.95	2.12	2.27	122.11	34.41	30.02	4.39	7.839	0		
750.00	749.93	748.93	748.93	2.30	2.45	124.55	35.25	30.50	4.74	7.429	0		
800.00	799.90	798.90	798.90	2.47	2.63	126.40	36.28	31.18	5.10	7.114	0		
850.00	849.85	848.85	848.85	2.65	2.81	127.16	37.51	32.05	5.46	6.874	0		
900.00	899.80	898.80	898.80	2.83	2.99	129.36	38.95	33.14	5.81	6.700	0		
950.00	949.73	948.73	948.73	3.01	3.17	132.60	40.65	34.48	6.17	6.590	0		
1,000.00	999.65	998.65	998.65	3.19	3.35	136.28	42.65	36.12	6.53	6.536	0		
1,050.00	1,049.55	1,048.55	1,048.55	3.36	3.53	140.04	44.98	38.10	6.88	6.537	0		
1,100.00	1,099.44	1,098.44	1,098.44	3.54	3.70	142.81	47.55	40.31	7.24	6.569	0		
1,150.00	1,149.35	1,148.35	1,148.35	3.72	3.88	137.88	49.95	42.35	7.60	6.575	0		
1,200.00	1,199.28	1,198.28	1,198.28	3.90	4.06	123.12	51.68	43.73	7.96	6.496	0		
1,250.00	1,249.23	1,247.89	1,247.88	4.08	4.24	108.61	52.80	44.50	8.30	6.358	0		
1,300.00	1,299.20	1,297.40	1,297.38	4.25	4.41	84.88	53.52	44.87	8.65	6.186	0		
1,350.00	1,349.18	1,346.86	1,346.79	4.42	4.58	65.66	54.28	45.29	8.99	6.038	0		
1,400.00	1,399.17	1,396.26	1,396.11	4.59	4.75	11.25	54.97	45.65	9.33	5.894	0		
1,450.00	1,449.17	1,445.60	1,445.30	4.76	4.92	-18.72	56.52	46.85	9.66	5.849	0		
1,500.00	1,499.14	1,494.86	1,494.34	4.92	5.09	-15.45	58.06	48.07	9.99	5.809	0		
1,550.00	1,549.09	1,544.03	1,543.21	5.09	5.26	-12.44	59.52	49.19	10.33	5.764	0		
1,600.00	1,599.00	1,593.14	1,591.91	5.26	5.43	-18.43	61.11	50.45	10.66	5.734	0		
1,650.00	1,648.85	1,642.19	1,640.43	5.43	5.60	-21.32	62.97	51.98	10.99	5.730	0		
1,700.00	1,698.64	1,691.17	1,688.77	5.60	5.77	-22.54	65.07	53.76	11.32	5.749	0		
1,750.00	1,748.34	1,740.10	1,736.91	5.77	5.95	-22.85	67.38	55.74	11.65	5.786	0		
1,800.00	1,797.95	1,788.97	1,784.83	5.94	6.12	-22.66	69.87	57.90	11.97	5.836	0		
1,850.00	1,847.45	1,837.78	1,832.52	6.11	6.29	-22.20	72.51	60.21	12.30	5.896	0		
1,900.00	1,896.82	1,886.53	1,879.98	6.29	6.47	-21.61	75.28	62.66	12.62	5.965	0		
1,950.00	1,946.05	1,935.23	1,927.18	6.46	6.65	-20.97	78.16	65.22	12.94	6.040	0		
2,000.00	1,995.12	1,983.86	1,974.12	6.63	6.82	-20.32	81.14	67.88	13.26	6.119	0		
2,050.00	2,044.02	2,032.44	2,020.77	6.80	7.00	-19.71	84.19	70.61	13.58	6.199	0		
2,100.00	2,092.73	2,080.96	2,067.14	6.98	7.18	-19.13	87.31	73.41	13.90	6.283	0		
2,150.00	2,141.24	2,129.43	2,113.21	7.15	7.36	-18.61	90.48	76.27	14.21	6.368	0		
2,200.00	2,189.53	2,177.84	2,158.96	7.33	7.55	-18.15	93.69	79.16	14.53	6.450	0		
2,250.00	2,237.60	2,226.19	2,204.38	7.51	7.73	-17.74	96.93	82.09	14.84	6.532	0		
2,300.00	2,285.41	2,274.49	2,249.47	7.69	7.92	-17.39	100.20	85.05	15.15	6.613	0		
2,350.00	2,332.97	2,322.73	2,294.21	7.87	8.10	-17.10	103.49	88.02	15.47	6.692	0		
2,400.00	2,380.25	2,371.33	2,338.97	8.05	8.29	-16.86	106.77	90.99	15.78	6.766	0		
2,450.00	2,427.24	2,421.25	2,384.86	8.24	8.49	-16.75	109.49	93.39	16.10	6.801	0		
2,500.00	2,473.96	2,471.21	2,430.78	8.42	8.69	-16.69	111.49	95.04	16.45	6.778	0		
2,550.00	2,520.63	2,521.17	2,476.71	8.61	8.90	-16.52	113.36	96.52	16.83	6.734	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
2,600.00	2,567.30	2,571.14	2,522.63	8.80	9.10	-16.36	115.23	98.01	17.22	6.691	0		
2,650.00	2,613.97	2,621.10	2,568.56	8.99	9.30	-16.20	117.10	99.49	17.61	6.649	0		
2,700.00	2,660.64	2,671.07	2,614.49	9.18	9.51	-16.05	118.97	100.97	18.00	6.608	0		
2,750.00	2,707.32	2,721.03	2,660.42	9.38	9.72	-15.90	120.85	102.45	18.40	6.568	0		
2,800.00	2,753.99	2,770.99	2,706.34	9.57	9.93	-15.76	122.72	103.92	18.80	6.528	0		
2,850.00	2,800.66	2,820.96	2,752.27	9.77	10.13	-15.62	124.60	105.40	19.20	6.490	0		
2,900.00	2,847.33	2,870.92	2,798.20	9.97	10.35	-15.49	126.47	106.87	19.60	6.452	0		
2,950.00	2,894.00	2,920.89	2,844.12	10.17	10.56	-15.36	128.35	108.34	20.01	6.415	0		
3,000.00	2,940.67	2,970.85	2,890.05	10.37	10.77	-15.23	130.23	109.81	20.41	6.380	0		
3,050.00	2,987.34	3,020.81	2,935.98	10.57	10.98	-15.11	132.10	111.28	20.82	6.345	0		
3,100.00	3,034.01	3,070.78	2,981.91	10.77	11.20	-14.99	133.98	112.75	21.23	6.311	0		
3,150.00	3,080.68	3,120.74	3,027.83	10.97	11.41	-14.87	135.86	114.22	21.64	6.277	0		
3,200.00	3,127.35	3,170.71	3,073.76	11.17	11.63	-14.76	137.74	115.68	22.06	6.245	0		
3,250.00	3,174.02	3,220.67	3,119.69	11.38	11.84	-14.65	139.62	117.15	22.47	6.214	0		
3,300.00	3,220.69	3,270.63	3,165.61	11.58	12.06	-14.54	141.50	118.62	22.89	6.183	0		
3,350.00	3,267.36	3,320.60	3,211.54	11.79	12.28	-14.44	143.38	120.08	23.30	6.153	0		
3,400.00	3,314.03	3,370.56	3,257.47	11.99	12.49	-14.33	145.26	121.54	23.72	6.124	0		
3,450.00	3,360.70	3,420.53	3,303.39	12.20	12.71	-14.23	147.15	123.01	24.14	6.096	0		
3,500.00	3,407.37	3,470.49	3,349.32	12.41	12.93	-14.14	149.03	124.47	24.56	6.068	0		
3,550.00	3,454.05	3,520.45	3,395.25	12.62	13.15	-14.04	150.91	125.93	24.98	6.041	0		
3,600.00	3,500.72	3,570.42	3,441.18	12.82	13.37	-13.95	152.79	127.39	25.40	6.015	0		
3,650.00	3,547.39	3,620.38	3,487.10	13.03	13.59	-13.86	154.68	128.85	25.83	5.989	0		
3,700.00	3,594.06	3,670.35	3,533.03	13.24	13.81	-13.77	156.56	130.31	26.25	5.964	0		
3,750.00	3,640.73	3,720.31	3,578.96	13.45	14.03	-13.69	158.44	131.77	26.67	5.940	0		
3,800.00	3,687.40	3,770.27	3,624.88	13.66	14.25	-13.61	160.33	133.23	27.10	5.916	0		
3,850.00	3,734.07	3,820.24	3,670.81	13.87	14.47	-13.52	162.21	134.69	27.53	5.893	0		
3,900.00	3,780.74	3,870.20	3,716.74	14.08	14.70	-13.45	164.10	136.15	27.95	5.871	0		
3,950.00	3,827.41	3,920.17	3,762.67	14.29	14.92	-13.37	165.99	137.61	28.38	5.849	0		
4,000.00	3,874.08	3,970.13	3,808.59	14.51	15.14	-13.29	167.87	139.06	28.81	5.827	0		
4,050.00	3,920.75	4,020.09	3,854.52	14.72	15.36	-13.22	169.76	140.52	29.24	5.806	0		
4,100.00	3,967.42	4,070.06	3,900.45	14.93	15.59	-13.14	171.64	141.98	29.67	5.786	0		
4,150.00	4,014.09	4,120.02	3,946.37	15.14	15.81	-13.07	173.53	143.43	30.10	5.766	0		
4,200.00	4,060.76	4,169.98	3,992.30	15.36	16.03	-13.00	175.42	144.89	30.53	5.746	0		
4,250.00	4,107.43	4,219.95	4,038.23	15.57	16.26	-12.94	177.30	146.35	30.96	5.727	0		
4,300.00	4,154.10	4,269.91	4,084.15	15.78	16.48	-12.87	179.19	147.80	31.39	5.709	0		
4,350.00	4,200.78	4,319.88	4,130.08	16.00	16.71	-12.80	181.08	149.26	31.82	5.691	0		
4,400.00	4,247.45	4,369.84	4,176.01	16.21	16.93	-12.74	182.97	150.71	32.25	5.673	0		
4,450.00	4,294.12	4,419.80	4,221.94	16.42	17.16	-12.68	184.86	152.17	32.69	5.656	0		
4,500.00	4,340.79	4,469.77	4,267.86	16.64	17.38	-12.62	186.74	153.63	33.12	5.639	0		
4,550.00	4,387.46	4,519.73	4,313.79	16.85	17.61	-12.56	188.63	155.08	33.55	5.622	0		
4,600.00	4,434.13	4,569.70	4,359.72	17.07	17.83	-12.50	190.52	156.53	33.99	5.606	0		
4,650.00	4,480.80	4,619.66	4,405.64	17.28	18.06	-12.44	192.41	157.99	34.42	5.590	0		
4,700.00	4,527.47	4,669.62	4,451.57	17.50	18.28	-12.38	194.30	159.44	34.86	5.574	0		
4,750.00	4,574.14	4,719.59	4,497.50	17.71	18.51	-12.33	196.19	160.90	35.29	5.559	0		
4,800.00	4,620.81	4,769.55	4,543.43	17.93	18.74	-12.27	198.08	162.35	35.73	5.544	0		
4,850.00	4,667.48	4,819.52	4,589.35	18.15	18.96	-12.22	199.97	163.81	36.16	5.530	0		
4,900.00	4,714.15	4,869.48	4,635.28	18.36	19.19	-12.17	201.86	165.26	36.60	5.516	0		
4,950.00	4,760.82	4,919.44	4,681.21	18.58	19.42	-12.11	203.75	166.71	37.03	5.502	0		
5,000.00	4,807.49	4,969.41	4,727.13	18.79	19.64	-12.06	205.64	168.17	37.47	5.488	0		
5,050.00	4,854.16	5,019.37	4,773.06	19.01	19.87	-12.01	207.53	169.62	37.91	5.475	0		
5,100.00	4,900.83	5,069.34	4,818.99	19.23	20.10	-11.97	209.42	171.07	38.34	5.461	0		
5,150.00	4,947.50	5,119.30	4,864.91	19.45	20.32	-11.92	211.31	172.53	38.78	5.449	0		

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
5,200.00	4,994.18	5,169.26	4,910.84	19.66	20.55	-11.87	213.20	173.98	39.22	5.436	0		
5,250.00	5,040.85	5,219.23	4,956.77	19.88	20.78	-11.82	215.09	175.43	39.66	5.424	0		
5,300.00	5,087.52	5,269.19	5,002.70	20.10	21.01	-11.78	216.98	176.89	40.10	5.412	0		
5,350.00	5,134.19	5,319.16	5,048.62	20.31	21.23	-11.73	218.87	178.34	40.53	5.400	0		
5,400.00	5,180.86	5,369.12	5,094.55	20.53	21.46	-11.69	220.77	179.79	40.97	5.388	0		
5,450.00	5,227.53	5,419.08	5,140.48	20.75	21.69	-11.65	222.66	181.25	41.41	5.377	0		
5,500.00	5,274.20	5,469.05	5,186.40	20.97	21.92	-11.60	224.55	182.70	41.85	5.366	0		
5,550.00	5,320.87	5,519.01	5,232.33	21.19	22.15	-11.56	226.44	184.15	42.29	5.355	0		
5,600.00	5,367.54	5,568.97	5,278.26	21.40	22.37	-11.52	228.33	185.60	42.73	5.344	0		
5,650.00	5,414.21	5,618.94	5,324.18	21.62	22.60	-11.48	230.22	187.06	43.17	5.333	0		
5,700.00	5,460.88	5,668.90	5,370.11	21.84	22.83	-11.44	232.12	188.51	43.61	5.323	0		
5,750.00	5,507.55	5,718.87	5,416.04	22.06	23.06	-11.40	234.01	189.96	44.05	5.313	0		
5,800.00	5,554.22	5,768.83	5,461.97	22.28	23.29	-11.36	235.90	191.41	44.49	5.303	0		
5,850.00	5,600.89	5,818.79	5,507.89	22.49	23.52	-11.33	237.79	192.86	44.93	5.293	0		
5,900.00	5,647.56	5,868.76	5,553.82	22.71	23.74	-11.29	239.69	194.32	45.37	5.283	0		
5,950.00	5,694.23	5,918.72	5,599.75	22.93	23.97	-11.25	241.58	195.77	45.81	5.274	0		
6,000.00	5,740.91	5,968.69	5,645.67	23.15	24.20	-11.22	243.47	197.22	46.25	5.264	0		
6,050.00	5,787.58	6,018.65	5,691.60	23.37	24.43	-11.18	245.36	198.67	46.69	5.255	0		
6,100.00	5,834.25	6,068.61	5,737.53	23.59	24.66	-11.15	247.26	200.12	47.13	5.246	0		
6,150.00	5,880.92	6,118.58	5,783.46	23.81	24.89	-11.11	249.15	201.58	47.57	5.237	0		
6,200.00	5,927.59	6,168.54	5,829.38	24.03	25.12	-11.08	251.04	203.03	48.01	5.229	0		
6,250.00	5,974.26	6,218.51	5,875.31	24.25	25.35	-11.05	252.94	204.48	48.45	5.220	0		
6,300.00	6,021.08	6,268.45	5,921.22	24.46	25.58	-11.00	255.24	206.31	48.93	5.216	0		
6,350.00	6,068.20	6,318.35	5,967.09	24.68	25.81	-10.93	258.40	209.00	49.40	5.231	0		
6,400.00	6,115.60	6,368.50	6,013.19	24.89	26.04	-10.82	262.42	212.57	49.85	5.264	0		
6,450.00	6,163.27	6,423.29	6,063.78	25.10	26.28	-10.69	266.76	216.46	50.30	5.304	0		
6,500.00	6,211.20	6,478.18	6,114.85	25.30	26.53	-10.57	271.02	220.29	50.73	5.342	0		
6,550.00	6,259.37	6,533.16	6,166.40	25.51	26.77	-10.45	275.20	224.05	51.15	5.380	0		
6,600.00	6,307.77	6,588.25	6,218.39	25.71	27.01	-10.34	279.29	227.74	51.55	5.418	0		
6,650.00	6,356.38	6,643.43	6,270.82	25.90	27.24	-10.23	283.29	231.36	51.92	5.456	0		
6,700.00	6,405.18	6,698.70	6,323.66	26.10	27.47	-10.12	287.20	234.91	52.28	5.493	0		
6,750.00	6,454.17	6,754.06	6,376.89	26.28	27.69	-10.02	291.01	238.40	52.62	5.531	0		
6,800.00	6,503.33	6,809.52	6,430.48	26.47	27.92	-9.92	294.74	241.80	52.94	5.568	0		
6,850.00	6,552.63	6,865.06	6,484.43	26.65	28.13	-9.83	298.37	245.13	53.23	5.605	0		
6,900.00	6,602.08	6,920.68	6,538.71	26.84	28.34	-9.74	301.90	248.38	53.52	5.641	0		
6,950.00	6,651.64	6,976.40	6,593.30	27.01	28.55	-9.65	305.33	251.56	53.77	5.678	0		
7,000.00	6,701.32	7,032.19	6,648.18	27.19	28.76	-9.56	308.66	254.65	54.01	5.715	0		
7,050.00	6,751.08	7,088.06	6,703.32	27.36	28.96	-9.48	311.90	257.67	54.23	5.752	0		
7,100.00	6,800.93	7,144.01	6,758.70	27.53	29.15	-9.40	315.03	260.60	54.43	5.788	0		
7,150.00	6,850.83	7,200.04	6,814.30	27.69	29.35	-9.32	318.05	263.45	54.60	5.825	0		
7,200.00	6,900.78	7,256.14	6,870.10	27.86	29.53	-9.25	320.97	266.21	54.76	5.862	0		
7,250.00	6,950.76	7,312.31	6,926.07	28.01	29.72	-9.18	323.79	268.90	54.89	5.899	0		
7,300.00	7,000.76	7,368.55	6,982.20	28.17	29.90	-9.11	326.49	271.49	55.00	5.936	0		
7,350.00	7,050.76	7,424.87	7,038.46	28.32	30.07	-9.03	328.69	273.38	55.32	5.942	0		
7,400.00	7,100.76	7,481.27	7,094.84	28.47	30.25	-8.96	329.93	274.28	55.64	5.930	0		
7,450.00	7,150.76	7,536.19	7,149.76	28.62	30.41	-8.97	330.21	274.26	55.95	5.901	0		
7,500.00	7,200.76	7,586.19	7,199.76	28.77	30.56	-8.97	330.21	273.96	56.25	5.871	0		
7,550.00	7,250.76	7,636.19	7,249.76	28.93	30.70	-8.97	330.21	273.67	56.54	5.840	0		
7,600.00	7,300.76	7,686.19	7,299.76	29.08	30.85	-8.97	330.21	273.37	56.84	5.810	0		
7,650.00	7,350.76	7,736.19	7,349.76	29.23	31.00	-8.97	330.21	273.07	57.14	5.779	0		
7,700.00	7,400.76	7,786.19	7,399.76	29.39	31.14	-8.97	330.21	272.78	57.43	5.750	0		
7,750.00	7,450.76	7,836.19	7,449.76	29.54	31.29	-8.97	330.21	272.48	57.73	5.720	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
7,800.00	7,500.76	7,886.19	7,499.76	29.69	31.44	89.47	330.21	272.18	58.03	5.691	0		
7,850.00	7,550.76	7,936.19	7,549.76	29.85	31.59	89.47	330.21	271.88	58.33	5.661	0		
7,900.00	7,600.76	7,986.19	7,599.76	30.00	31.73	89.47	330.21	271.58	58.63	5.632	0		
7,950.00	7,650.76	8,036.19	7,649.76	30.16	31.88	89.47	330.21	271.28	58.93	5.604	0		
8,000.00	7,700.76	8,086.19	7,699.76	30.31	32.03	89.47	330.21	270.98	59.23	5.575	0		
8,050.00	7,750.76	8,136.19	7,749.76	30.47	32.18	89.47	330.21	270.68	59.53	5.547	0		
8,100.00	7,800.76	8,186.19	7,799.76	30.62	32.33	89.47	330.21	270.38	59.83	5.519	0		
8,150.00	7,850.76	8,236.19	7,849.76	30.78	32.48	89.47	330.21	270.08	60.14	5.491	0		
8,200.00	7,900.76	8,286.19	7,899.76	30.93	32.63	89.47	330.21	269.77	60.44	5.464	0		
8,250.00	7,950.76	8,336.19	7,949.76	31.09	32.78	89.47	330.21	269.47	60.74	5.436	0		
8,300.00	8,000.76	8,386.19	7,999.76	31.25	32.93	89.47	330.21	269.16	61.05	5.409	0		
8,350.00	8,050.76	8,436.19	8,049.76	31.40	33.08	89.47	330.21	268.86	61.35	5.382	0		
8,400.00	8,100.76	8,486.19	8,099.76	31.56	33.24	89.47	330.21	268.55	61.66	5.356	0		
8,450.00	8,150.76	8,536.19	8,149.76	31.72	33.39	89.47	330.21	268.25	61.96	5.329	0		
8,500.00	8,200.76	8,586.19	8,199.76	31.88	33.54	89.47	330.21	267.94	62.27	5.303	0		
8,550.00	8,250.76	8,636.19	8,249.76	32.03	33.69	89.47	330.21	267.63	62.58	5.277	0		
8,600.00	8,300.76	8,686.19	8,299.76	32.19	33.84	89.47	330.21	267.32	62.89	5.251	0		
8,650.00	8,350.76	8,736.19	8,349.76	32.35	34.00	89.47	330.21	267.01	63.20	5.225	0		
8,700.00	8,400.76	8,786.19	8,399.76	32.51	34.15	89.47	330.21	266.71	63.50	5.200	0		
8,750.00	8,450.76	8,836.19	8,449.76	32.67	34.30	89.47	330.21	266.40	63.81	5.175	0		
8,800.00	8,500.76	8,886.19	8,499.76	32.83	34.46	89.47	330.21	266.09	64.12	5.150	0		
8,850.00	8,550.76	8,936.19	8,549.76	32.98	34.61	89.47	330.21	265.78	64.43	5.125	0		
8,900.00	8,600.76	8,986.19	8,599.76	33.14	34.76	89.47	330.21	265.46	64.75	5.100	0		
8,950.00	8,650.76	9,036.19	8,649.76	33.30	34.92	89.47	330.21	265.15	65.06	5.076	0		
9,000.00	8,700.76	9,086.19	8,699.76	33.46	35.07	89.47	330.21	264.84	65.37	5.051	0		
9,050.00	8,750.76	9,136.19	8,749.76	33.62	35.23	89.47	330.21	264.53	65.68	5.027	0		
9,100.00	8,800.76	9,186.19	8,799.76	33.78	35.38	89.47	330.21	264.22	66.00	5.004	0		
9,150.00	8,850.76	9,236.19	8,849.76	33.94	35.54	89.47	330.21	263.90	66.31	4.980	0		
9,200.00	8,900.76	9,286.19	8,899.76	34.10	35.69	89.47	330.21	263.59	66.62	4.956	0		
9,250.00	8,950.76	9,336.19	8,949.76	34.26	35.85	89.47	330.21	263.27	66.94	4.933	0		
9,300.00	9,000.76	9,386.19	8,999.76	34.43	36.01	89.47	330.21	262.96	67.25	4.910	0		
9,350.00	9,050.76	9,436.19	9,049.76	34.59	36.16	89.47	330.21	262.64	67.57	4.887	0		
9,400.00	9,100.76	9,486.19	9,099.76	34.75	36.32	89.47	330.21	262.33	67.88	4.864	0		
9,450.00	9,150.76	9,536.19	9,149.76	34.91	36.47	89.47	330.21	262.01	68.20	4.842	0		
9,500.00	9,200.76	9,586.19	9,199.76	35.07	36.63	89.47	330.21	261.70	68.52	4.820	0		
9,550.00	9,250.76	9,636.19	9,249.76	35.23	36.79	89.47	330.21	261.38	68.83	4.797	0		
9,600.00	9,300.76	9,686.19	9,299.76	35.39	36.95	89.47	330.21	261.06	69.15	4.775	0		
9,650.00	9,350.76	9,736.19	9,349.76	35.56	37.10	89.47	330.21	260.74	69.47	4.753	0		
9,700.00	9,400.76	9,786.19	9,399.76	35.72	37.26	89.47	330.21	260.43	69.79	4.732	0		
9,750.00	9,450.76	9,836.19	9,449.76	35.88	37.42	89.47	330.21	260.11	70.10	4.710	0		
9,800.00	9,500.76	9,886.19	9,499.76	36.04	37.58	89.47	330.21	259.79	70.42	4.689	0		
9,850.00	9,550.76	9,936.19	9,549.76	36.21	37.73	89.47	330.21	259.47	70.74	4.668	0		
9,900.00	9,600.76	9,986.19	9,599.76	36.37	37.89	89.47	330.21	259.15	71.06	4.647	0		
9,950.00	9,650.76	10,036.19	9,649.76	36.53	38.05	89.47	330.21	258.83	71.38	4.626	0		
10,000.00	9,700.76	10,086.19	9,699.76	36.70	38.21	89.47	330.21	258.51	71.70	4.605	0		
10,050.00	9,750.76	10,136.19	9,749.76	36.86	38.37	89.47	330.21	258.19	72.02	4.585	0		
10,100.00	9,800.76	10,186.19	9,799.76	37.02	38.53	89.47	330.21	257.87	72.34	4.564	0		
10,150.00	9,850.76	10,236.19	9,849.76	37.19	38.69	89.47	330.21	257.55	72.67	4.544	0		
10,200.00	9,900.76	10,286.19	9,899.76	37.35	38.85	89.47	330.21	257.22	72.99	4.524	0		
10,250.00	9,950.76	10,336.19	9,949.76	37.51	39.01	89.47	330.21	256.90	73.31	4.504	0		
10,300.00	10,000.76	10,386.19	9,999.76	37.68	39.17	89.47	330.21	256.58	73.63	4.485	0		
10,350.00	10,050.76	10,436.19	10,049.76	37.84	39.33	89.47	330.21	256.26	73.95	4.465	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 510H - O27F 510H - PLAN 3													Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision		
10,400.00	10,100.76	10,486.19	10,099.76	38.01	39.49	89.47	330.21	255.93	74.28	4.446	0			
10,450.00	10,150.76	10,536.19	10,149.76	38.17	39.65	89.47	330.21	255.61	74.60	4.426	0			
10,500.00	10,200.76	10,586.19	10,199.76	38.34	39.81	89.47	330.21	255.29	74.92	4.407	0			
10,550.00	10,250.76	10,636.19	10,249.76	38.50	39.97	89.47	330.21	254.96	75.25	4.388	0			
10,600.00	10,300.76	10,686.19	10,299.76	38.66	40.13	89.47	330.21	254.64	75.57	4.369	0			
10,650.00	10,350.76	10,736.19	10,349.76	38.83	40.29	89.47	330.21	254.31	75.90	4.351	0			
10,700.00	10,400.76	10,786.19	10,399.76	38.99	40.45	89.47	330.21	253.99	76.22	4.332	0			
10,750.00	10,450.76	10,836.19	10,449.76	39.16	40.61	89.47	330.21	253.66	76.55	4.314	0			
10,800.00	10,500.76	10,886.19	10,499.76	39.33	40.77	89.47	330.21	253.34	76.87	4.296	0			
10,850.00	10,550.76	10,936.19	10,549.76	39.49	40.93	89.47	330.21	253.01	77.20	4.277	0			
10,900.00	10,600.76	10,986.19	10,599.76	39.66	41.10	89.47	330.21	252.68	77.53	4.259	0			
10,950.00	10,650.76	11,036.19	10,649.76	39.82	41.26	89.47	330.21	252.36	77.85	4.242	0			
11,000.00	10,700.76	11,086.19	10,699.76	39.99	41.42	89.47	330.21	252.03	78.18	4.224	0			
11,050.00	10,750.76	11,136.19	10,749.76	40.15	41.58	89.47	330.21	251.70	78.51	4.206	0			
11,100.00	10,800.76	11,186.19	10,799.76	40.32	41.74	89.47	330.21	251.38	78.83	4.189	0			
11,150.00	10,850.76	11,236.19	10,849.76	40.49	41.91	89.47	330.21	251.05	79.16	4.171	0			
11,200.00	10,900.76	11,286.19	10,899.76	40.65	42.07	89.47	330.21	250.72	79.49	4.154	0			
11,250.00	10,950.76	11,336.19	10,949.76	40.82	42.23	89.47	330.21	250.39	79.82	4.137	0			
11,300.00	11,000.76	11,386.19	10,999.76	40.99	42.39	89.47	330.21	250.07	80.14	4.120	0			
11,350.00	11,050.76	11,436.19	11,049.76	41.15	42.56	89.47	330.21	249.74	80.47	4.103	0			
11,400.00	11,100.76	11,486.19	11,099.76	41.32	42.72	89.47	330.21	249.41	80.80	4.087	0			
11,450.00	11,150.76	11,536.19	11,149.76	41.49	42.88	89.47	330.21	249.08	81.13	4.070	0			
11,500.00	11,200.76	11,586.19	11,199.76	41.65	43.05	89.47	330.21	248.75	81.46	4.054	0			
11,550.00	11,250.76	11,636.19	11,249.76	41.82	43.21	89.47	330.21	248.42	81.79	4.037	0			
11,600.00	11,300.76	11,686.19	11,299.76	41.99	43.37	89.47	330.21	248.09	82.12	4.021	0			
11,650.00	11,350.76	11,736.19	11,349.76	42.15	43.54	89.47	330.21	247.76	82.45	4.005	0			
11,700.00	11,400.76	11,786.19	11,399.76	42.32	43.70	89.47	330.21	247.43	82.78	3.989	0			
11,750.00	11,450.76	11,836.19	11,449.76	42.49	43.87	89.47	330.21	247.10	83.11	3.973	0			
11,800.00	11,500.76	11,886.19	11,499.76	42.66	44.03	89.47	330.21	246.77	83.44	3.957	0			
11,850.00	11,550.76	11,936.19	11,549.76	42.82	44.19	89.47	330.21	246.44	83.77	3.942	0			
11,878.06	11,578.82	11,964.25	11,577.82	42.92	44.29	89.47	330.21	246.25	83.96	3.933	0			
11,900.00	11,600.76	11,986.16	11,599.73	42.99	44.36	89.45	330.21	246.11	84.10	3.926	0			
11,950.00	11,650.76	12,035.83	11,649.27	43.16	44.52	88.88	330.24	245.79	84.45	3.911	0			
12,000.00	11,700.76	12,084.57	11,697.44	43.33	44.68	87.61	330.43	245.62	84.81	3.896	0		SF	

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 511H - O27F 511H - O27F 511H												Offset Well Error:	0.00 usft
Survey Program: 214-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	
0.00	0.00	0.00	0.00	0.00	0.00	-0.29	60.00				0		
50.00	50.00	49.91	49.91	0.04	0.08	-130.24	60.08	59.96	0.11	532.080	0		ES
100.00	100.00	99.81	99.81	0.13	0.15	-130.35	60.31	60.03	0.28	215.629	0		
150.00	150.00	149.71	149.71	0.22	0.23	-130.54	60.69	60.24	0.45	135.911	0		
200.00	200.00	199.61	199.61	0.36	0.31	-121.75	61.21	60.54	0.67	92.005	0		
250.00	250.00	249.69	249.69	0.54	0.46	-128.79	61.75	60.76	0.99	62.213	0		
300.00	299.99	299.85	299.85	0.71	0.63	-145.43	62.24	60.89	1.35	46.146	0		
350.00	349.99	349.75	349.74	0.89	0.81	-172.81	62.73	61.02	1.70	36.843	0		
400.00	399.99	399.55	399.55	1.07	0.99	149.04	63.32	61.27	2.06	30.810	0		
450.00	449.99	449.62	449.61	1.24	1.17	133.64	63.98	61.57	2.41	26.573	0		
500.00	499.99	499.74	499.73	1.42	1.34	126.03	64.57	61.81	2.76	23.395	0		
550.00	549.98	549.70	549.69	1.59	1.52	121.10	65.14	62.03	3.11	20.933	0		
600.00	599.98	599.68	599.66	1.77	1.70	117.48	65.75	62.29	3.46	18.983	0		
650.00	649.97	649.95	649.90	1.94	1.88	115.97	66.34	62.52	3.82	17.375	0		
700.00	699.95	700.23	700.16	2.12	2.06	115.02	66.83	62.66	4.17	16.018	0		
750.00	749.93	750.59	750.47	2.30	2.23	114.84	67.19	62.67	4.53	14.843	0		
800.00	799.90	800.86	800.69	2.47	2.41	113.80	67.41	62.53	4.88	13.808	0		
850.00	849.85	850.96	850.73	2.65	2.59	111.61	67.58	62.34	5.24	12.904	0		
900.00	899.80	901.02	900.74	2.83	2.77	110.94	67.74	62.15	5.59	12.114	0		
950.00	949.73	951.03	950.70	3.01	2.94	111.90	67.98	62.03	5.95	11.432	0		
1,000.00	999.65	1,000.96	1,000.61	3.19	3.12	113.95	68.37	62.07	6.30	10.852	0		
1,050.00	1,049.55	1,050.83	1,050.47	3.36	3.30	116.56	69.02	62.37	6.65	10.373	0		SF
1,100.00	1,099.44	1,062.00	1,061.64	3.54	3.34	117.25	79.91	73.03	6.87	11.628	0		
1,150.00	1,149.35	1,062.00	1,061.64	3.72	3.34	110.34	113.38	106.33	7.05	16.079	0		
1,200.00	1,199.28	1,062.00	1,061.64	3.90	3.34	93.73	155.61	148.38	7.23	21.524	0		
1,250.00	1,249.23	1,062.00	1,061.64	4.08	3.34	78.30	201.19	193.78	7.40	27.172	0		
1,300.00	1,299.20	1,062.00	1,061.64	4.25	3.34	53.37	248.24	240.66	7.58	32.759	0		
1,350.00	1,349.18	1,062.00	1,061.64	4.42	3.34	34.05	296.24	288.49	7.75	38.237	0		
1,400.00	1,399.17	1,062.00	1,061.64	4.59	3.34	-19.91	344.75	336.83	7.92	43.546	0		
1,450.00	1,449.17	1,062.00	1,061.64	4.76	3.34	-49.89	393.75	385.66	8.08	48.709	0		
1,500.00	1,499.14	1,062.00	1,061.64	4.92	3.34	-45.92	442.90	434.65	8.25	53.695	0		
1,550.00	1,549.09	1,062.00	1,061.64	5.09	3.34	-42.43	492.12	483.71	8.41	58.500	0		
1,600.00	1,599.00	1,062.00	1,061.64	5.26	3.34	-46.05	541.43	532.86	8.58	63.123	0		
1,650.00	1,648.85	1,062.00	1,061.64	5.43	3.34	-46.04	590.83	582.09	8.74	67.587	0		
1,700.00	1,698.64	1,062.00	1,061.64	5.60	3.34	-44.03	640.28	631.38	8.90	71.910	0		
1,750.00	1,748.34	1,062.00	1,061.64	5.77	3.34	-41.00	689.76	680.70	9.06	76.092	0		
1,800.00	1,797.95	1,062.00	1,061.64	5.94	3.34	-37.52	739.25	730.03	9.22	80.154	0		
1,850.00	1,847.45	1,062.00	1,061.64	6.11	3.34	-33.98	788.73	779.35	9.38	84.091	0		
1,900.00	1,896.82	1,062.00	1,061.64	6.29	3.34	-30.57	838.20	828.67	9.53	87.925	0		
1,950.00	1,946.05	1,062.00	1,061.64	6.46	3.34	-27.41	887.63	877.95	9.69	91.642	0		
2,000.00	1,995.12	1,062.00	1,061.64	6.63	3.34	-24.55	937.03	927.20	9.84	95.269	0		
2,050.00	2,044.02	1,062.00	1,061.64	6.80	3.34	-22.00	986.38	976.39	9.99	98.757	0		
2,100.00	2,092.73	1,062.00	1,061.64	6.98	3.34	-19.74	1,035.68	1,025.54	10.13	102.221	0		
2,150.00	2,141.24	1,062.00	1,061.64	7.15	3.34	-17.75	1,084.91	1,074.64	10.28	105.582	0		
2,200.00	2,189.53	1,062.00	1,061.64	7.33	3.34	-16.00	1,134.08	1,123.66	10.42	108.808	0		
2,250.00	2,237.60	1,062.00	1,061.64	7.51	3.34	-14.45	1,183.18	1,172.61	10.57	111.974	0		
2,300.00	2,285.41	1,062.00	1,061.64	7.69	3.34	-13.09	1,232.20	1,221.49	10.71	115.056	0		
2,350.00	2,332.97	1,062.00	1,061.64	7.87	3.34	-11.88	1,281.13	1,270.28	10.85	118.061	0		
2,400.00	2,380.25	1,062.00	1,061.64	8.05	3.34	-10.82	1,329.98	1,318.98	10.99	120.986	0		
2,450.00	2,427.24	1,062.00	1,061.64	8.24	3.34	-9.87	1,378.73	1,367.60	11.13	123.836	0		
2,500.00	2,473.96	1,062.00	1,061.64	8.42	3.34	-9.39	1,427.41	1,416.12	11.29	126.393	0		
2,550.00	2,520.63	1,062.00	1,061.64	8.61	3.34	-9.39	1,476.14	1,464.66	11.48	128.581	0		

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



GeoGuidance
Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 511H - O27F 511H - PLAN 5												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-0.29	60.00				0		
50.00	50.00	50.00	50.00	0.04	0.06	-130.25	60.04	59.94	0.10	608.747	0		
100.00	100.00	100.00	100.00	0.13	0.13	-130.37	60.15	59.90	0.25	239.495	0		
150.00	150.00	150.00	150.00	0.22	0.30	-130.58	60.34	59.82	0.52	116.036	0		
200.00	200.00	200.00	200.00	0.36	0.48	-121.83	60.58	59.74	0.84	72.057	0		
250.00	250.00	250.00	250.00	0.54	0.66	-128.89	60.82	59.62	1.20	50.732	0		
300.00	299.99	299.99	299.99	0.71	0.84	-145.46	61.13	59.57	1.56	39.262	0		
350.00	349.99	349.99	349.99	0.89	1.02	-172.69	61.48	59.57	1.91	32.143	0		
400.00	399.99	399.99	399.99	1.07	1.20	149.33	61.81	59.54	2.27	27.256	0		
450.00	449.99	449.99	449.99	1.24	1.38	134.23	62.13	59.50	2.62	23.701	0		
500.00	499.99	499.99	499.99	1.42	1.56	127.12	62.47	59.50	2.97	21.004	0	ES	
550.00	549.98	549.98	549.98	1.59	1.74	122.89	62.85	59.52	3.33	18.883	0		
600.00	599.98	599.98	599.98	1.77	1.92	120.13	63.25	59.57	3.68	17.176	0		
650.00	649.97	649.97	649.97	1.94	2.10	119.74	63.74	59.70	4.04	15.786	0		
700.00	699.95	699.95	699.95	2.12	2.28	120.21	64.37	59.97	4.39	14.654	0		
750.00	749.93	749.93	749.93	2.30	2.46	121.71	65.15	60.41	4.75	13.721	0		
800.00	799.90	799.90	799.90	2.47	2.63	122.56	66.11	61.00	5.10	12.951	0		
850.00	849.85	849.85	849.85	2.65	2.81	122.26	67.20	61.74	5.46	12.307	0		
900.00	899.80	899.80	899.80	2.83	2.99	123.36	68.46	62.64	5.82	11.769	0		
950.00	949.73	949.73	949.73	3.01	3.17	125.56	69.93	63.76	6.17	11.328	0		
1,000.00	999.65	999.65	999.65	3.19	3.35	128.28	71.64	65.11	6.53	10.972	0		
1,050.00	1,049.55	1,049.55	1,049.55	3.36	3.53	131.21	73.65	66.76	6.89	10.695	0		
1,100.00	1,099.44	1,099.44	1,099.44	3.54	3.71	133.31	75.85	68.61	7.24	10.472	0		
1,150.00	1,149.35	1,149.35	1,149.35	3.72	3.89	127.87	77.90	70.30	7.60	10.249	0		
1,200.00	1,199.28	1,199.28	1,199.28	3.90	4.07	112.50	79.24	71.28	7.96	9.956	0		
1,250.00	1,249.23	1,249.23	1,249.23	4.08	4.24	97.28	79.92	71.62	8.31	9.620	0		
1,300.00	1,299.20	1,298.47	1,298.45	4.25	4.41	72.53	80.04	71.39	8.65	9.249	0		
1,301.95	1,301.15	1,300.41	1,300.39	4.26	4.42	72.11	80.04	71.37	8.67	9.234	0		
1,350.00	1,349.18	1,347.97	1,347.91	4.42	4.58	52.32	80.15	71.16	8.99	8.913	0		
1,387.40	1,386.58	1,384.96	1,384.83	4.55	4.71	12.88	80.40	71.15	9.25	8.695	0		
1,400.00	1,399.17	1,397.41	1,397.26	4.59	4.75	-3.10	80.14	70.81	9.33	8.588	0		
1,450.00	1,449.17	1,446.79	1,446.48	4.76	4.92	-33.83	80.96	71.29	9.67	8.373	0		
1,500.00	1,499.14	1,496.09	1,495.56	4.92	5.09	-31.34	81.68	71.68	10.00	8.166	0		
1,550.00	1,549.09	1,545.31	1,544.47	5.09	5.26	-29.16	82.19	71.85	10.34	7.952	0		
1,600.00	1,599.00	1,594.46	1,593.21	5.26	5.43	-35.93	82.76	72.09	10.67	7.756	0		
1,650.00	1,648.85	1,643.55	1,641.78	5.43	5.61	-39.43	83.62	72.61	11.01	7.597	0		
1,700.00	1,698.64	1,692.58	1,690.15	5.60	5.78	-41.09	84.74	73.40	11.34	7.472	0		
1,750.00	1,748.34	1,741.55	1,738.33	5.77	5.95	-41.71	86.10	74.43	11.67	7.375	0		
1,800.00	1,797.95	1,790.46	1,786.29	5.94	6.13	-41.70	87.69	75.69	12.01	7.303	0		
1,850.00	1,847.45	1,839.31	1,834.02	6.11	6.30	-41.32	89.50	77.16	12.34	7.253	0		
1,900.00	1,896.82	1,888.11	1,881.51	6.29	6.48	-40.72	91.49	78.82	12.67	7.221	0		
1,950.00	1,946.05	1,936.84	1,928.75	6.46	6.65	-40.00	93.67	80.67	13.00	7.205	0		
2,000.00	1,995.12	1,985.52	1,975.72	6.63	6.83	-39.23	96.00	82.67	13.33	7.202	0		
2,050.00	2,044.02	2,034.14	2,022.40	6.80	7.01	-38.45	98.48	84.82	13.66	7.210	0		
2,100.00	2,092.73	2,082.70	2,068.80	6.98	7.19	-37.68	101.09	87.10	13.98	7.229	0		
2,150.00	2,141.24	2,131.21	2,114.90	7.15	7.37	-36.95	103.81	89.50	14.31	7.255	0		
2,200.00	2,189.53	2,179.65	2,160.67	7.33	7.56	-36.26	106.64	92.01	14.64	7.286	0		
2,250.00	2,237.60	2,228.04	2,206.12	7.51	7.74	-35.63	109.57	94.60	14.96	7.323	0		
2,300.00	2,285.41	2,276.38	2,251.23	7.69	7.93	-35.05	112.57	97.29	15.29	7.364	0		
2,350.00	2,332.97	2,324.65	2,295.99	7.87	8.11	-34.53	115.66	100.04	15.61	7.407	0		
2,400.00	2,380.25	2,372.87	2,340.38	8.05	8.30	-34.07	118.80	102.86	15.94	7.453	0		
2,450.00	2,427.24	2,422.37	2,385.72	8.24	8.50	-33.71	121.80	105.53	16.27	7.485	0		

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 511H - O27F 511H - PLAN 5												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
2,500.00	2,473.96	2,472.31	2,431.45	8.42	8.70	-33.48	124.22	107.59	16.63	7.470	0		
2,550.00	2,520.63	2,522.25	2,477.19	8.61	8.90	-33.18	126.54	109.53	17.02	7.437	0		
2,600.00	2,567.30	2,572.19	2,522.93	8.80	9.11	-32.89	128.86	111.46	17.40	7.404	0		
2,650.00	2,613.97	2,622.14	2,568.66	8.99	9.31	-32.60	131.19	113.39	17.80	7.372	0		
2,700.00	2,660.64	2,672.08	2,614.40	9.18	9.52	-32.33	133.52	115.33	18.19	7.340	0		
2,750.00	2,707.32	2,722.02	2,660.14	9.38	9.73	-32.07	135.85	117.26	18.59	7.308	0		
2,800.00	2,753.99	2,771.96	2,705.88	9.57	9.94	-31.81	138.18	119.19	18.99	7.278	0		
2,850.00	2,800.66	2,821.90	2,751.61	9.77	10.15	-31.56	140.52	121.13	19.39	7.247	0		
2,900.00	2,847.33	2,871.84	2,797.35	9.97	10.36	-31.33	142.86	123.06	19.79	7.217	0		
2,950.00	2,894.00	2,921.79	2,843.09	10.17	10.57	-31.10	145.20	125.00	20.20	7.188	0		
3,000.00	2,940.67	2,971.73	2,888.82	10.37	10.79	-30.87	147.54	126.93	20.61	7.159	0		
3,050.00	2,987.34	3,021.67	2,934.56	10.57	11.00	-30.66	149.89	128.87	21.02	7.131	0		
3,100.00	3,034.01	3,071.61	2,980.30	10.77	11.21	-30.45	152.24	130.80	21.43	7.104	0		
3,150.00	3,080.68	3,121.55	3,026.03	10.97	11.43	-30.24	154.58	132.74	21.84	7.077	0		
3,200.00	3,127.35	3,171.50	3,071.77	11.17	11.65	-30.05	156.94	134.68	22.26	7.050	0		
3,250.00	3,174.02	3,221.44	3,117.51	11.38	11.86	-29.86	159.29	136.61	22.68	7.025	0		
3,300.00	3,220.69	3,271.38	3,163.24	11.58	12.08	-29.67	161.64	138.55	23.09	7.000	0		
3,350.00	3,267.36	3,321.32	3,208.98	11.79	12.30	-29.49	164.00	140.49	23.51	6.975	0		
3,400.00	3,314.03	3,371.26	3,254.72	11.99	12.52	-29.31	166.36	142.43	23.93	6.951	0		
3,450.00	3,360.70	3,421.20	3,300.45	12.20	12.74	-29.14	168.72	144.36	24.36	6.927	0		
3,500.00	3,407.37	3,471.15	3,346.19	12.41	12.96	-28.98	171.08	146.30	24.78	6.905	0		
3,550.00	3,454.05	3,521.09	3,391.93	12.62	13.18	-28.82	173.44	148.24	25.20	6.882	0		
3,600.00	3,500.72	3,571.03	3,437.66	12.82	13.40	-28.66	175.81	150.18	25.63	6.860	0		
3,650.00	3,547.39	3,620.97	3,483.40	13.03	13.62	-28.51	178.17	152.12	26.05	6.839	0		
3,700.00	3,594.06	3,670.91	3,529.14	13.24	13.85	-28.36	180.54	154.06	26.48	6.818	0		
3,750.00	3,640.73	3,720.86	3,574.88	13.45	14.07	-28.21	182.91	156.00	26.91	6.798	0		
3,800.00	3,687.40	3,770.80	3,620.61	13.66	14.29	-28.07	185.28	157.94	27.34	6.778	0		
3,850.00	3,734.07	3,820.74	3,666.35	13.87	14.51	-27.94	187.65	159.88	27.76	6.759	0		
3,900.00	3,780.74	3,870.68	3,712.09	14.08	14.74	-27.80	190.02	161.82	28.19	6.740	0		
3,950.00	3,827.41	3,920.62	3,757.82	14.29	14.96	-27.67	192.39	163.76	28.62	6.721	0		
4,000.00	3,874.08	3,970.56	3,803.56	14.51	15.19	-27.54	194.76	165.71	29.06	6.703	0		
4,050.00	3,920.75	4,020.51	3,849.30	14.72	15.41	-27.42	197.14	167.65	29.49	6.685	0		
4,100.00	3,967.42	4,070.45	3,895.03	14.93	15.64	-27.30	199.51	169.59	29.92	6.668	0		
4,150.00	4,014.09	4,120.39	3,940.77	15.14	15.86	-27.18	201.89	171.53	30.35	6.651	0		
4,200.00	4,060.76	4,170.33	3,986.51	15.36	16.09	-27.06	204.26	173.48	30.79	6.635	0		
4,250.00	4,107.43	4,220.27	4,032.24	15.57	16.31	-26.95	206.64	175.42	31.22	6.618	0		
4,300.00	4,154.10	4,270.21	4,077.98	15.78	16.54	-26.84	209.02	177.36	31.66	6.603	0		
4,350.00	4,200.78	4,320.16	4,123.72	16.00	16.76	-26.73	211.40	179.31	32.09	6.587	0		
4,400.00	4,247.45	4,370.10	4,169.45	16.21	16.99	-26.63	213.78	181.25	32.53	6.572	0		
4,450.00	4,294.12	4,420.04	4,215.19	16.42	17.22	-26.52	216.16	183.19	32.96	6.557	0		
4,500.00	4,340.79	4,469.98	4,260.93	16.64	17.44	-26.42	218.54	185.14	33.40	6.543	0		
4,550.00	4,387.46	4,519.92	4,306.66	16.85	17.67	-26.32	220.92	187.08	33.84	6.529	0		
4,600.00	4,434.13	4,569.87	4,352.40	17.07	17.90	-26.22	223.30	189.03	34.27	6.515	0		
4,650.00	4,480.80	4,619.81	4,398.14	17.28	18.13	-26.13	225.69	190.97	34.71	6.502	0		
4,700.00	4,527.47	4,669.75	4,443.88	17.50	18.35	-26.04	228.07	192.92	35.15	6.488	0		
4,750.00	4,574.14	4,719.69	4,489.61	17.71	18.58	-25.95	230.45	194.86	35.59	6.475	0		
4,800.00	4,620.81	4,769.63	4,535.35	17.93	18.81	-25.86	232.84	196.81	36.03	6.463	0		
4,850.00	4,667.48	4,819.57	4,581.09	18.15	19.04	-25.77	235.22	198.76	36.47	6.450	0		
4,900.00	4,714.15	4,869.52	4,626.82	18.36	19.27	-25.68	237.61	200.70	36.91	6.438	0		
4,950.00	4,760.82	4,919.46	4,672.56	18.58	19.49	-25.60	240.00	202.65	37.35	6.426	0		
5,000.00	4,807.49	4,969.40	4,718.30	18.79	19.72	-25.52	242.38	204.60	37.79	6.414	0		
5,050.00	4,854.16	5,019.34	4,764.03	19.01	19.95	-25.44	244.77	206.54	38.23	6.403	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 511H - O27F 511H - PLAN 5												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
5,100.00	4,900.83	5,069.28	4,809.77	19.23	20.18	-25.36	247.16	208.49	38.67	6.392	0		
5,150.00	4,947.50	5,119.23	4,855.51	19.45	20.41	-25.28	249.55	210.44	39.11	6.381	0		
5,200.00	4,994.18	5,169.17	4,901.24	19.66	20.64	-25.20	251.93	212.38	39.55	6.370	0		
5,250.00	5,040.85	5,219.11	4,946.98	19.88	20.87	-25.13	254.32	214.33	39.99	6.359	0		
5,300.00	5,087.52	5,269.05	4,992.72	20.10	21.10	-25.06	256.71	216.28	40.43	6.349	0		
5,350.00	5,134.19	5,318.99	5,038.45	20.31	21.33	-24.98	259.10	218.23	40.88	6.339	0		
5,400.00	5,180.86	5,368.93	5,084.19	20.53	21.56	-24.91	261.49	220.18	41.32	6.329	0		
5,450.00	5,227.53	5,418.88	5,129.93	20.75	21.79	-24.84	263.88	222.12	41.76	6.319	0		
5,500.00	5,274.20	5,468.82	5,175.67	20.97	22.02	-24.78	266.28	224.07	42.20	6.309	0		
5,550.00	5,320.87	5,518.76	5,221.40	21.19	22.25	-24.71	268.67	226.02	42.65	6.300	0		
5,600.00	5,367.54	5,568.70	5,267.14	21.40	22.48	-24.64	271.06	227.97	43.09	6.291	0		
5,650.00	5,414.21	5,618.64	5,312.88	21.62	22.71	-24.58	273.45	229.92	43.53	6.282	0		
5,700.00	5,460.88	5,668.59	5,358.61	21.84	22.94	-24.52	275.84	231.87	43.98	6.273	0		
5,750.00	5,507.55	5,718.53	5,404.35	22.06	23.17	-24.45	278.24	233.82	44.42	6.264	0		
5,800.00	5,554.22	5,768.47	5,450.09	22.28	23.40	-24.39	280.63	235.77	44.86	6.255	0		
5,850.00	5,600.89	5,818.41	5,495.82	22.49	23.63	-24.33	283.02	237.72	45.31	6.247	0		
5,900.00	5,647.56	5,868.35	5,541.56	22.71	23.86	-24.27	285.42	239.67	45.75	6.238	0		
5,950.00	5,694.23	5,918.29	5,587.30	22.93	24.09	-24.22	287.81	241.62	46.20	6.230	0		
6,000.00	5,740.91	5,968.24	5,633.03	23.15	24.32	-24.16	290.21	243.57	46.64	6.222	0		
6,050.00	5,787.58	6,018.18	5,678.77	23.37	24.55	-24.10	292.60	245.52	47.09	6.214	0		
6,100.00	5,834.25	6,068.12	5,724.51	23.59	24.78	-24.05	295.00	247.47	47.53	6.207	0		
6,150.00	5,880.92	6,118.06	5,770.24	23.81	25.01	-23.99	297.39	249.42	47.97	6.199	0		
6,200.00	5,927.59	6,168.00	5,815.98	24.03	25.24	-23.94	299.79	251.37	48.42	6.191	0		
6,250.00	5,974.26	6,217.95	5,861.72	24.25	25.48	-23.89	302.18	253.32	48.87	6.184	0		
6,300.00	6,021.08	6,267.87	5,907.43	24.46	25.71	-23.82	304.96	255.62	49.34	6.181	0		SF
6,350.00	6,068.20	6,317.73	5,953.10	24.68	25.94	-23.70	308.54	258.74	49.80	6.196	0		
6,400.00	6,115.60	6,367.52	5,998.70	24.89	26.17	-23.53	312.92	262.68	50.24	6.228	0		
6,450.00	6,163.27	6,417.23	6,044.23	25.10	26.40	-23.31	318.10	267.43	50.67	6.278	0		
6,500.00	6,211.20	6,466.84	6,089.66	25.30	26.63	-23.04	324.08	273.00	51.08	6.344	0		
6,550.00	6,259.37	6,516.34	6,134.98	25.51	26.86	-22.73	330.88	279.40	51.48	6.428	0		
6,600.00	6,307.77	6,565.70	6,180.19	25.71	27.09	-22.38	338.48	286.62	51.86	6.527	0		
6,650.00	6,356.38	6,614.91	6,225.26	25.90	27.32	-22.00	346.90	294.68	52.22	6.644	0		
6,700.00	6,405.18	6,663.97	6,270.19	26.10	27.54	-21.60	356.13	303.57	52.56	6.776	0		
6,750.00	6,454.17	6,712.85	6,314.95	26.28	27.77	-21.17	366.19	313.31	52.88	6.924	0		
6,800.00	6,503.33	6,761.54	6,359.54	26.47	28.00	-20.73	377.07	323.88	53.19	7.089	0		
6,850.00	6,552.63	6,810.02	6,403.94	26.65	28.22	-20.28	388.78	335.30	53.48	7.270	0		
6,900.00	6,602.08	6,858.28	6,448.14	26.84	28.44	-19.82	401.31	347.56	53.75	7.466	0		
6,950.00	6,651.64	6,906.31	6,492.13	27.01	28.67	-19.35	414.67	360.67	54.00	7.679	0		
7,000.00	6,701.32	6,954.09	6,535.88	27.19	28.89	-18.89	428.87	374.63	54.23	7.908	0		
7,050.00	6,751.08	7,001.60	6,579.40	27.36	29.11	-18.43	443.88	389.44	54.44	8.153	0		
7,100.00	6,800.93	7,048.84	6,622.65	27.53	29.33	-17.97	459.73	405.09	54.64	8.414	0		
7,150.00	6,850.83	7,095.78	6,665.64	27.69	29.55	-17.52	476.40	421.59	54.81	8.692	0		
7,200.00	6,900.78	7,142.42	6,708.35	27.86	29.76	-17.09	493.89	438.92	54.96	8.986	0		
7,250.00	6,950.76	7,188.73	6,750.77	28.01	29.98	-16.66	512.19	457.11	55.09	9.298	0		
7,300.00	7,000.76	7,234.71	6,792.87	28.17	30.19	-16.24	531.32	476.12	55.20	9.626	0		
7,350.00	7,050.76	7,280.50	6,834.81	28.32	30.41	82.73	550.90	495.39	55.51	9.924	0		
7,400.00	7,100.76	7,326.29	6,876.74	28.47	30.62	83.21	570.51	514.68	55.83	10.219	0		
7,450.00	7,150.76	7,372.08	6,918.68	28.62	30.83	83.65	590.16	534.01	56.16	10.509	0		
7,500.00	7,200.76	7,417.87	6,960.61	28.77	31.05	84.06	609.84	553.36	56.48	10.797	0		
7,550.00	7,250.76	7,463.66	7,002.55	28.93	31.26	84.45	629.54	572.73	56.81	11.081	0		
7,600.00	7,300.76	7,509.45	7,044.48	29.08	31.47	84.82	649.26	592.13	57.14	11.363	0		
7,650.00	7,350.76	7,555.24	7,086.42	29.23	31.69	85.17	669.01	611.54	57.47	11.641	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 511H - O27F 511H - PLAN 5												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
7,700.00	7,400.76	7,601.03	7,128.35	29.39	31.90	85.49	688.78	630.97	57.80	11.916	0		
7,750.00	7,450.76	7,646.82	7,170.29	29.54	32.11	85.80	708.56	650.42	58.14	12.188	0		
7,800.00	7,500.76	7,692.61	7,212.22	29.69	32.32	86.09	728.36	669.89	58.47	12.457	0		
7,850.00	7,550.76	7,738.40	7,254.16	29.85	32.54	86.36	748.17	689.37	58.81	12.723	0		
7,900.00	7,600.76	7,784.19	7,296.09	30.00	32.75	86.62	768.00	708.86	59.14	12.985	0		
7,950.00	7,650.76	7,829.98	7,338.03	30.16	32.96	86.87	787.84	728.36	59.48	13.245	0		
8,000.00	7,700.76	7,875.77	7,379.96	30.31	33.18	87.11	807.70	747.88	59.82	13.502	0		
8,050.00	7,750.76	7,920.07	7,429.75	30.47	33.43	87.37	827.45	767.26	60.19	13.746	0		
8,100.00	7,800.76	7,965.09	7,489.84	30.62	33.73	87.66	846.34	785.73	60.61	13.963	0		
8,150.00	7,850.76	8,010.30	7,551.61	30.78	34.02	87.91	864.18	803.15	61.03	14.160	0		
8,200.00	7,900.76	8,128.67	7,615.00	30.93	34.31	88.14	880.94	819.49	61.45	14.335	0		
8,250.00	7,950.76	8,197.17	7,679.98	31.09	34.61	88.35	896.61	834.73	61.88	14.490	0		
8,300.00	8,000.76	8,266.72	7,746.48	31.25	34.89	88.54	911.13	848.83	62.31	14.624	0		
8,350.00	8,050.76	8,337.28	7,814.42	31.40	35.18	88.71	924.50	861.77	62.73	14.737	0		
8,400.00	8,100.76	8,408.78	7,883.73	31.56	35.46	88.86	936.69	873.53	63.16	14.830	0		
8,450.00	8,150.76	8,481.15	7,954.30	31.72	35.73	88.99	947.67	884.08	63.59	14.904	0		
8,500.00	8,200.76	8,554.31	8,026.03	31.88	36.00	89.10	957.41	893.41	64.01	14.958	0		
8,550.00	8,250.76	8,628.17	8,098.80	32.03	36.26	89.20	965.91	901.48	64.43	14.992	0		
8,600.00	8,300.76	8,702.65	8,172.49	32.19	36.52	89.28	973.14	908.29	64.84	15.007	0		
8,650.00	8,350.76	8,777.66	8,246.95	32.35	36.77	89.34	979.09	913.83	65.25	15.004	0		
8,700.00	8,400.76	8,853.08	8,322.04	32.51	37.02	89.39	983.74	918.08	65.66	14.982	0		
8,750.00	8,450.76	8,928.83	8,397.61	32.67	37.26	89.43	987.09	921.03	66.06	14.943	0		
8,800.00	8,500.76	9,004.80	8,473.52	32.83	37.49	89.45	989.12	922.67	66.45	14.885	0		
8,850.00	8,550.76	9,080.88	8,549.59	32.98	37.71	89.46	989.84	923.01	66.83	14.811	0		
8,900.00	8,600.76	9,132.05	8,600.76	33.14	37.85	89.46	989.84	922.71	67.13	14.745	0		
8,950.00	8,650.76	9,182.05	8,650.76	33.30	37.99	89.46	989.84	922.41	67.43	14.680	0		
9,000.00	8,700.76	9,232.05	8,700.76	33.46	38.13	89.46	989.84	922.11	67.73	14.615	0		
9,050.00	8,750.76	9,282.05	8,750.76	33.62	38.28	89.46	989.84	921.82	68.03	14.551	0		
9,100.00	8,800.76	9,332.05	8,800.76	33.78	38.42	89.46	989.84	921.52	68.32	14.487	0		
9,150.00	8,850.76	9,382.05	8,850.76	33.94	38.56	89.46	989.84	921.22	68.62	14.424	0		
9,200.00	8,900.76	9,432.05	8,900.76	34.10	38.70	89.46	989.84	920.92	68.92	14.361	0		
9,250.00	8,950.76	9,482.05	8,950.76	34.26	38.85	89.46	989.84	920.61	69.23	14.299	0		
9,300.00	9,000.76	9,532.05	9,000.76	34.43	38.99	89.46	989.84	920.31	69.53	14.237	0		
9,350.00	9,050.76	9,582.05	9,050.76	34.59	39.14	89.46	989.84	920.01	69.83	14.175	0		
9,400.00	9,100.76	9,632.05	9,100.76	34.75	39.28	89.46	989.84	919.71	70.13	14.114	0		
9,450.00	9,150.76	9,682.05	9,150.76	34.91	39.42	89.46	989.84	919.41	70.44	14.053	0		
9,500.00	9,200.76	9,732.05	9,200.76	35.07	39.57	89.46	989.84	919.10	70.74	13.993	0		
9,550.00	9,250.76	9,782.05	9,250.76	35.23	39.71	89.46	989.84	918.80	71.04	13.933	0		
9,600.00	9,300.76	9,832.05	9,300.76	35.39	39.86	89.46	989.84	918.49	71.35	13.873	0		
9,650.00	9,350.76	9,882.05	9,350.76	35.56	40.00	89.46	989.84	918.19	71.65	13.814	0		
9,700.00	9,400.76	9,932.05	9,400.76	35.72	40.15	89.46	989.84	917.88	71.96	13.756	0		
9,750.00	9,450.76	9,982.05	9,450.76	35.88	40.30	89.46	989.84	917.58	72.26	13.697	0		
9,800.00	9,500.76	10,032.05	9,500.76	36.04	40.44	89.46	989.84	917.27	72.57	13.640	0		
9,850.00	9,550.76	10,082.05	9,550.76	36.21	40.59	89.46	989.84	916.96	72.88	13.582	0		
9,900.00	9,600.76	10,132.05	9,600.76	36.37	40.74	89.46	989.84	916.65	73.19	13.525	0		
9,950.00	9,650.76	10,182.05	9,650.76	36.53	40.88	89.46	989.84	916.35	73.49	13.468	0		
10,000.00	9,700.76	10,232.05	9,700.76	36.70	41.03	89.46	989.84	916.04	73.80	13.412	0		
10,050.00	9,750.76	10,282.05	9,750.76	36.86	41.18	89.46	989.84	915.73	74.11	13.356	0		
10,100.00	9,800.76	10,332.05	9,800.76	37.02	41.33	89.46	989.84	915.42	74.42	13.301	0		
10,150.00	9,850.76	10,382.05	9,850.76	37.19	41.47	89.46	989.84	915.11	74.73	13.246	0		
10,200.00	9,900.76	10,432.05	9,900.76	37.35	41.62	89.46	989.84	914.80	75.04	13.191	0		
10,250.00	9,950.76	10,482.05	9,950.76	37.51	41.77	89.46	989.84	914.49	75.35	13.136	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													OUTRIDER 27 FED - O27F 511H - O27F 511H - PLAN 5		Offset Site Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis		Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision				
10,300.00	10,000.76	10,532.05	10,000.76	37.68	41.92	89.46	989.84	914.18	75.66	13.082	0					
10,350.00	10,050.76	10,582.05	10,050.76	37.84	42.07	89.46	989.84	913.87	75.97	13.029	0					
10,400.00	10,100.76	10,632.05	10,100.76	38.01	42.22	89.46	989.84	913.56	76.28	12.976	0					
10,450.00	10,150.76	10,682.05	10,150.76	38.17	42.37	89.46	989.84	913.24	76.60	12.923	0					
10,500.00	10,200.76	10,732.05	10,200.76	38.34	42.52	89.46	989.84	912.93	76.91	12.870	0					
10,550.00	10,250.76	10,782.05	10,250.76	38.50	42.67	89.46	989.84	912.62	77.22	12.818	0					
10,600.00	10,300.76	10,832.05	10,300.76	38.66	42.82	89.46	989.84	912.30	77.54	12.766	0					
10,650.00	10,350.76	10,882.05	10,350.76	38.83	42.97	89.46	989.84	911.99	77.85	12.715	0					
10,700.00	10,400.76	10,932.05	10,400.76	38.99	43.12	89.46	989.84	911.68	78.16	12.664	0					
10,750.00	10,450.76	10,982.05	10,450.76	39.16	43.27	89.46	989.84	911.36	78.48	12.613	0					
10,800.00	10,500.76	11,032.05	10,500.76	39.33	43.42	89.46	989.84	911.05	78.79	12.563	0					
10,850.00	10,550.76	11,082.05	10,550.76	39.49	43.57	89.46	989.84	910.73	79.11	12.512	0					
10,900.00	10,600.76	11,132.05	10,600.76	39.66	43.72	89.46	989.84	910.42	79.42	12.463	0					
10,950.00	10,650.76	11,182.05	10,650.76	39.82	43.88	89.46	989.84	910.10	79.74	12.413	0					
11,000.00	10,700.76	11,232.05	10,700.76	39.99	44.03	89.46	989.84	909.78	80.06	12.364	0					
11,050.00	10,750.76	11,282.05	10,750.76	40.15	44.18	89.46	989.84	909.47	80.37	12.316	0					
11,100.00	10,800.76	11,332.05	10,800.76	40.32	44.33	89.46	989.84	909.15	80.69	12.267	0					
11,150.00	10,850.76	11,382.05	10,850.76	40.49	44.49	89.46	989.84	908.83	81.01	12.219	0					
11,200.00	10,900.76	11,432.05	10,900.76	40.65	44.64	89.46	989.84	908.52	81.32	12.171	0					
11,250.00	10,950.76	11,482.05	10,950.76	40.82	44.79	89.46	989.84	908.20	81.64	12.124	0					
11,300.00	11,000.76	11,532.05	11,000.76	40.99	44.94	89.46	989.84	907.88	81.96	12.077	0					
11,350.00	11,050.76	11,582.05	11,050.76	41.15	45.10	89.46	989.84	907.56	82.28	12.030	0					
11,400.00	11,100.76	11,632.05	11,100.76	41.32	45.25	89.46	989.84	907.24	82.60	11.984	0					
11,450.00	11,150.76	11,682.05	11,150.76	41.49	45.41	89.46	989.84	906.92	82.92	11.938	0					
11,500.00	11,200.76	11,732.05	11,200.76	41.65	45.56	89.46	989.84	906.60	83.24	11.892	0					
11,550.00	11,250.76	11,782.05	11,250.76	41.82	45.71	89.46	989.84	906.28	83.56	11.846	0					
11,600.00	11,300.76	11,832.05	11,300.76	41.99	45.87	89.46	989.84	905.96	83.88	11.801	0					
11,650.00	11,350.76	11,882.05	11,350.76	42.15	46.02	89.46	989.84	905.64	84.20	11.756	0					
11,700.00	11,400.76	11,932.05	11,400.76	42.32	46.18	89.46	989.84	905.32	84.52	11.711	0					
11,750.00	11,450.76	11,982.05	11,450.76	42.49	46.33	89.46	989.84	905.00	84.84	11.667	0					
11,800.00	11,500.76	12,032.05	11,500.76	42.66	46.49	89.46	989.84	904.68	85.16	11.623	0					
11,850.00	11,550.76	12,082.05	11,550.76	42.82	46.64	89.46	989.84	904.36	85.48	11.579	0					
11,900.00	11,600.76	12,132.05	11,600.76	42.99	46.80	89.46	989.84	904.04	85.81	11.536	0					
11,950.00	11,650.76	12,182.05	11,650.76	43.16	46.95	89.46	989.84	903.71	86.13	11.493	0					
11,955.99	11,656.75	12,188.05	11,656.75	43.18	46.97	89.46	989.84	903.67	86.17	11.488	0					
12,000.00	11,700.76	12,231.84	11,700.52	43.33	47.11	89.39	989.84	903.39	86.45	11.450	0					

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 512H - O27F 512H - O27F 512H												Offset Well Error:	0.00 usft
Survey Program: 214-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-0.32	90.01				0		
50.00	50.00	49.01	49.01	0.04	0.08	-130.25	90.04	89.93	0.11	808.269	0		
100.00	100.00	99.01	99.01	0.13	0.15	-130.28	90.14	89.87	0.28	324.127	0		
150.00	150.00	149.02	149.02	0.22	0.23	-130.34	90.32	89.88	0.44	203.038	0		
200.00	200.00	199.02	199.02	0.36	0.31	-121.37	90.55	89.89	0.66	136.473	0		
250.00	250.00	249.16	249.16	0.54	0.45	-128.18	90.75	89.76	0.99	91.647	0		
300.00	299.99	299.35	299.35	0.71	0.63	-144.58	90.92	89.57	1.35	67.489	0		
350.00	349.99	349.35	349.35	0.89	0.81	-171.73	91.06	89.36	1.70	53.617	0		
400.00	399.99	399.27	399.27	1.07	0.98	150.23	91.21	89.16	2.05	44.550	0		
450.00	449.99	449.44	449.44	1.24	1.16	134.97	91.34	88.94	2.40	38.104	0		
500.00	499.99	499.66	499.66	1.42	1.33	127.72	91.38	88.64	2.75	33.265	0		
550.00	549.98	549.96	549.96	1.59	1.51	123.38	91.32	88.21	3.10	29.445	0		
600.00	599.98	600.30	600.29	1.77	1.69	120.52	91.10	87.65	3.46	26.362	0		
650.00	649.97	651.03	651.01	1.94	1.87	120.21	90.67	86.86	3.81	23.779	0		
700.00	699.95	701.58	701.53	2.12	2.06	121.07	90.00	85.83	4.17	21.586	0		
750.00	749.93	751.58	751.48	2.30	2.24	123.44	89.38	84.86	4.52	19.755	0		
800.00	799.90	801.23	801.02	2.47	2.41	125.74	89.04	84.16	4.88	18.252	0		
805.26	805.15	806.39	806.17	2.49	2.43	125.85	89.03	84.12	4.92	18.114	0		CC, ES
850.00	849.85	850.26	849.91	2.65	2.59	127.30	89.35	84.12	5.23	17.086	0		
900.00	899.80	899.24	898.71	2.83	2.77	130.56	90.56	84.98	5.58	16.224	0		
950.00	949.73	948.41	947.71	3.01	2.94	134.71	92.62	86.69	5.93	15.608	0		
1,000.00	999.65	998.03	997.18	3.19	3.12	139.04	95.43	89.14	6.29	15.174	0		
1,050.00	1,049.55	1,048.22	1,047.27	3.36	3.29	143.16	98.59	91.94	6.65	14.835	0		SF
1,100.00	1,099.44	1,072.00	1,071.00	3.54	3.38	144.72	105.18	98.27	6.91	15.223	0		
1,150.00	1,149.35	1,072.00	1,071.00	3.72	3.38	137.55	129.61	122.52	7.09	18.284	0		
1,200.00	1,199.28	1,072.00	1,071.00	3.90	3.38	120.31	165.48	158.21	7.27	22.770	0		
1,250.00	1,249.23	1,072.00	1,071.00	4.08	3.38	103.81	206.87	199.43	7.44	27.796	0		
1,300.00	1,299.20	1,072.00	1,071.00	4.25	3.38	77.57	251.04	243.43	7.62	32.963	0		
1,350.00	1,349.18	1,072.00	1,071.00	4.42	3.38	57.18	296.92	289.13	7.79	38.136	0		
1,400.00	1,399.17	1,072.00	1,071.00	4.59	3.38	1.93	343.76	335.80	7.96	43.212	0		
1,450.00	1,449.17	1,072.00	1,071.00	4.76	3.38	-29.21	391.47	383.35	8.12	48.198	0		
1,500.00	1,499.14	1,072.00	1,071.00	4.92	3.38	-27.55	439.54	431.25	8.29	53.045	0		
1,550.00	1,549.09	1,072.00	1,071.00	5.09	3.38	-26.29	487.81	479.36	8.45	57.735	0		
1,600.00	1,599.00	1,072.00	1,071.00	5.26	3.38	-32.21	536.27	527.66	8.61	62.254	0		
1,650.00	1,648.85	1,072.00	1,071.00	5.43	3.38	-34.66	584.90	576.13	8.78	66.627	0		
1,700.00	1,698.64	1,072.00	1,071.00	5.60	3.38	-35.13	633.66	624.72	8.94	70.866	0		
1,750.00	1,748.34	1,072.00	1,071.00	5.77	3.38	-34.47	682.49	673.39	9.10	74.970	0		
1,800.00	1,797.95	1,072.00	1,071.00	5.94	3.38	-33.15	731.38	722.12	9.26	78.957	0		
1,850.00	1,847.45	1,072.00	1,071.00	6.11	3.38	-31.46	780.29	770.87	9.42	82.821	0		
1,900.00	1,896.82	1,072.00	1,071.00	6.29	3.38	-29.60	829.22	819.64	9.58	86.585	0		
1,950.00	1,946.05	1,072.00	1,071.00	6.46	3.38	-27.68	878.14	868.40	9.73	90.235	0		
2,000.00	1,995.12	1,072.00	1,071.00	6.63	3.38	-25.78	927.04	917.15	9.88	93.799	0		
2,050.00	2,044.02	1,072.00	1,071.00	6.80	3.38	-23.95	975.91	965.87	10.04	97.229	0		
2,100.00	2,092.73	1,072.00	1,071.00	6.98	3.38	-22.21	1,024.74	1,014.56	10.18	100.638	0		
2,150.00	2,141.24	1,072.00	1,071.00	7.15	3.38	-20.59	1,073.52	1,063.19	10.33	103.948	0		
2,200.00	2,189.53	1,072.00	1,071.00	7.33	3.38	-19.07	1,122.25	1,111.78	10.48	107.131	0		
2,250.00	2,237.60	1,072.00	1,071.00	7.51	3.38	-17.68	1,170.92	1,160.30	10.62	110.256	0		
2,300.00	2,285.41	1,072.00	1,071.00	7.69	3.38	-16.40	1,219.52	1,208.75	10.76	113.301	0		
2,350.00	2,332.97	1,072.00	1,071.00	7.87	3.38	-15.22	1,268.04	1,257.13	10.91	116.273	0		
2,400.00	2,380.25	1,072.00	1,071.00	8.05	3.38	-14.14	1,316.48	1,305.43	11.05	119.167	0		
2,450.00	2,427.24	1,072.00	1,071.00	8.24	3.38	-13.15	1,364.84	1,353.65	11.19	121.990	0		
2,500.00	2,473.96	1,072.00	1,071.00	8.42	3.38	-12.63	1,413.12	1,401.78	11.35	124.525	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												OUTRIDER 27 FED - O27F 512H - O27F 512H - O27F 512H		Offset Site Error:		0.00 usft	
Survey Program:												214-XOMR2_OWSG MWD+IFR1+MS		Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis		Distance						Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Riskd Separation Factor			Probability of Collision			
2,550.00	2,520.63	1,072.00	1,071.00	8.61	3.38	-12.63	1,461.49	1,449.96	11.54	126.699	0						



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 512H - O27F 512H - PLAN 6												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-0.32	90.01				0		
50.00	50.00	49.00	49.00	0.04	0.06	-130.27	90.04	89.94	0.10	924.703	0		
100.00	100.00	99.00	99.00	0.13	0.12	-130.35	90.15	89.90	0.25	360.753	0		
150.00	150.00	149.00	149.00	0.22	0.30	-130.49	90.34	89.82	0.52	174.937	0		
200.00	200.00	199.00	199.00	0.36	0.48	-121.63	90.58	89.74	0.84	108.202	0		
250.00	250.00	249.00	249.00	0.54	0.66	-128.58	90.82	89.62	1.20	75.981	0		
300.00	299.99	298.99	298.99	0.71	0.84	-145.06	91.13	89.57	1.55	58.662	0		
350.00	349.99	348.99	348.99	0.89	1.02	-172.25	91.48	89.57	1.91	47.914	0		
400.00	399.99	398.99	398.99	1.07	1.20	149.75	91.80	89.54	2.26	40.547	0		
450.00	449.99	448.99	448.99	1.24	1.38	134.56	92.12	89.50	2.62	35.193	0		
500.00	499.99	498.99	498.99	1.42	1.56	127.33	92.47	89.50	2.97	31.127	0		
550.00	549.98	549.16	549.15	1.59	1.73	123.21	92.80	89.48	3.32	27.944	0		
600.00	599.98	599.28	599.26	1.77	1.91	121.04	93.08	89.41	3.67	25.355	0	ES	
650.00	649.97	649.31	649.24	1.94	2.08	121.73	93.43	89.41	4.02	23.244	0		
700.00	699.95	699.19	699.03	2.12	2.25	123.73	94.01	89.65	4.37	21.523	0		
750.00	749.93	748.89	748.58	2.30	2.43	127.17	94.96	90.24	4.72	20.125	0		
800.00	799.90	798.54	798.04	2.47	2.60	130.11	96.39	91.32	5.07	19.012	0		
850.00	849.85	848.16	847.47	2.65	2.78	131.75	98.31	92.89	5.42	18.129	0		
900.00	899.80	897.74	896.86	2.83	2.95	134.60	100.73	94.96	5.78	17.441	0		
950.00	949.73	947.29	946.22	3.01	3.13	138.37	103.70	97.57	6.13	16.919	0		
1,000.00	999.65	996.81	995.56	3.19	3.30	142.45	107.23	100.74	6.48	16.541	0		
1,050.00	1,049.55	1,046.30	1,044.85	3.36	3.48	146.55	111.33	104.49	6.84	16.286	0		
1,100.00	1,099.44	1,095.77	1,094.13	3.54	3.66	149.66	115.87	108.68	7.19	16.113	0		
1,150.00	1,149.35	1,145.26	1,143.44	3.72	3.84	145.16	120.43	112.88	7.55	15.956	0		
1,200.00	1,199.28	1,194.78	1,192.77	3.90	4.01	130.68	124.53	116.63	7.91	15.754	0		
1,250.00	1,249.23	1,243.29	1,241.07	4.08	4.19	116.24	128.22	119.96	8.26	15.530	0		
1,300.00	1,299.20	1,291.51	1,288.99	4.25	4.36	92.02	131.78	123.17	8.61	15.313	0		
1,350.00	1,349.18	1,339.60	1,336.69	4.42	4.54	72.22	135.53	126.58	8.95	15.143	0		
1,400.00	1,399.17	1,387.58	1,384.17	4.59	4.71	17.07	139.36	130.07	9.29	14.995	0		
1,450.00	1,449.17	1,435.41	1,431.38	4.76	4.89	-13.65	144.12	134.48	9.64	14.955	0		
1,500.00	1,499.14	1,483.08	1,478.30	4.92	5.06	-11.38	148.98	139.00	9.98	14.934	0		
1,550.00	1,549.09	1,530.61	1,524.94	5.09	5.24	-9.60	153.83	143.51	10.31	14.914	0		
1,600.00	1,599.00	1,578.01	1,571.28	5.26	5.42	-16.86	158.84	148.19	10.65	14.909	0		
1,650.00	1,648.85	1,625.30	1,617.35	5.43	5.59	-20.93	164.13	153.13	10.99	14.929	0		
1,700.00	1,698.64	1,672.47	1,663.12	5.60	5.77	-23.24	169.65	158.32	11.33	14.971	0		
1,750.00	1,748.34	1,719.53	1,708.60	5.77	5.95	-24.53	175.38	163.71	11.67	15.029	0		
1,800.00	1,797.95	1,766.48	1,753.76	5.94	6.13	-25.22	181.29	169.29	12.01	15.099	0		
1,850.00	1,847.45	1,813.32	1,798.60	6.11	6.31	-25.53	187.36	175.01	12.34	15.179	0		
1,900.00	1,896.82	1,860.05	1,843.11	6.29	6.49	-25.61	193.55	180.87	12.68	15.267	0		
1,950.00	1,946.05	1,906.67	1,887.28	6.46	6.67	-25.55	199.86	186.84	13.01	15.359	0		
2,000.00	1,995.12	1,953.19	1,931.10	6.63	6.85	-25.41	206.25	192.91	13.35	15.454	0		
2,050.00	2,044.02	2,000.00	1,974.94	6.80	7.04	-25.20	212.73	199.05	13.68	15.547	0		
2,100.00	2,092.73	2,045.92	2,017.67	6.98	7.23	-24.98	219.27	205.25	14.01	15.649	0		
2,150.00	2,141.24	2,092.12	2,060.40	7.15	7.41	-24.75	225.85	211.51	14.34	15.749	0		
2,200.00	2,189.53	2,138.23	2,102.74	7.33	7.60	-24.52	232.48	217.80	14.67	15.842	0		
2,250.00	2,237.60	2,184.24	2,144.70	7.51	7.79	-24.29	239.13	224.13	15.01	15.936	0		
2,300.00	2,285.41	2,230.15	2,186.25	7.69	7.99	-24.08	245.81	230.47	15.34	16.027	0		
2,350.00	2,332.97	2,275.96	2,227.41	7.87	8.18	-23.89	252.49	236.82	15.67	16.115	0		
2,400.00	2,380.25	2,324.42	2,270.69	8.05	8.39	-23.71	258.99	242.98	16.01	16.175	0		
2,450.00	2,427.24	2,374.06	2,315.00	8.24	8.61	-23.61	264.79	248.43	16.36	16.185	0		
2,500.00	2,473.96	2,423.79	2,359.39	8.42	8.83	-23.49	269.90	253.17	16.73	16.132	0		
2,550.00	2,520.63	2,473.53	2,403.80	8.61	9.05	-23.28	274.91	257.77	17.13	16.046	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 512H - O27F 512H - PLAN 6												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
2,600.00	2,567.30	2,523.27	2,448.20	8.80	9.27	-23.08	279.91	262.38	17.54	15.962	0		
2,650.00	2,613.97	2,573.00	2,492.61	8.99	9.49	-22.88	284.92	266.98	17.94	15.879	0		
2,700.00	2,660.64	2,622.74	2,537.01	9.18	9.72	-22.69	289.93	271.58	18.35	15.798	0		
2,750.00	2,707.32	2,672.48	2,581.42	9.38	9.94	-22.51	294.95	276.19	18.76	15.718	0		
2,800.00	2,753.99	2,722.22	2,625.82	9.57	10.17	-22.33	299.97	280.79	19.18	15.641	0		
2,850.00	2,800.66	2,771.96	2,670.22	9.77	10.40	-22.16	304.99	285.39	19.60	15.564	0		
2,900.00	2,847.33	2,821.70	2,714.63	9.97	10.63	-21.99	310.01	290.00	20.01	15.490	0		
2,950.00	2,894.00	2,871.44	2,759.03	10.17	10.86	-21.83	315.04	294.61	20.43	15.418	0		
3,000.00	2,940.67	2,921.18	2,803.44	10.37	11.09	-21.68	320.07	299.21	20.86	15.347	0		
3,050.00	2,987.34	2,970.92	2,847.84	10.57	11.32	-21.53	325.10	303.82	21.28	15.278	0		
3,100.00	3,034.01	3,020.66	2,892.25	10.77	11.55	-21.38	330.13	308.43	21.70	15.211	0		
3,150.00	3,080.68	3,070.40	2,936.65	10.97	11.78	-21.24	335.17	313.04	22.13	15.145	0		
3,200.00	3,127.35	3,120.13	2,981.05	11.17	12.02	-21.10	340.20	317.65	22.56	15.081	0		
3,250.00	3,174.02	3,169.87	3,025.46	11.38	12.25	-20.97	345.24	322.26	22.99	15.019	0		
3,300.00	3,220.69	3,219.61	3,069.86	11.58	12.48	-20.84	350.28	326.87	23.42	14.958	0		
3,350.00	3,267.36	3,269.35	3,114.27	11.79	12.72	-20.71	355.33	331.48	23.85	14.899	0		
3,400.00	3,314.03	3,319.09	3,158.67	11.99	12.96	-20.59	360.37	336.09	24.28	14.842	0		
3,450.00	3,360.70	3,368.83	3,203.08	12.20	13.19	-20.47	365.42	340.70	24.71	14.785	0		
3,500.00	3,407.37	3,418.57	3,247.48	12.41	13.43	-20.36	370.46	345.31	25.15	14.731	0		
3,550.00	3,454.05	3,468.31	3,291.88	12.62	13.67	-20.25	375.51	349.93	25.58	14.677	0		
3,600.00	3,500.72	3,518.05	3,336.29	12.82	13.90	-20.14	380.56	354.54	26.02	14.625	0		
3,650.00	3,547.39	3,567.79	3,380.69	13.03	14.14	-20.03	385.61	359.15	26.46	14.574	0		
3,700.00	3,594.06	3,617.53	3,425.10	13.24	14.38	-19.93	390.66	363.77	26.90	14.525	0		
3,750.00	3,640.73	3,667.27	3,469.50	13.45	14.62	-19.82	395.72	368.38	27.33	14.477	0		
3,800.00	3,687.40	3,717.00	3,513.90	13.66	14.86	-19.73	400.77	373.00	27.77	14.430	0		
3,850.00	3,734.07	3,766.74	3,558.31	13.87	15.10	-19.63	405.83	377.62	28.21	14.384	0		
3,900.00	3,780.74	3,816.48	3,602.71	14.08	15.34	-19.53	410.89	382.23	28.65	14.339	0		
3,950.00	3,827.41	3,866.22	3,647.12	14.29	15.58	-19.44	415.95	386.85	29.10	14.295	0		
4,000.00	3,874.08	3,915.96	3,691.52	14.51	15.82	-19.35	421.01	391.47	29.54	14.253	0		
4,050.00	3,920.75	3,965.70	3,735.93	14.72	16.06	-19.27	426.07	396.08	29.98	14.211	0		
4,100.00	3,967.42	4,015.44	3,780.33	14.93	16.30	-19.18	431.13	400.70	30.42	14.171	0		
4,150.00	4,014.09	4,065.18	3,824.73	15.14	16.54	-19.10	436.19	405.32	30.87	14.131	0		
4,200.00	4,060.76	4,114.92	3,869.14	15.36	16.78	-19.02	441.25	409.94	31.31	14.092	0		
4,250.00	4,107.43	4,164.66	3,913.54	15.57	17.02	-18.94	446.32	414.56	31.76	14.055	0		
4,300.00	4,154.10	4,214.40	3,957.95	15.78	17.27	-18.86	451.38	419.18	32.20	14.018	0		
4,350.00	4,200.78	4,264.13	4,002.35	16.00	17.51	-18.78	456.45	423.80	32.65	13.982	0		
4,400.00	4,247.45	4,313.87	4,046.76	16.21	17.75	-18.71	461.51	428.42	33.09	13.946	0		
4,450.00	4,294.12	4,363.61	4,091.16	16.42	17.99	-18.64	466.58	433.04	33.54	13.912	0		
4,500.00	4,340.79	4,413.35	4,135.56	16.64	18.24	-18.57	471.65	437.66	33.98	13.878	0		
4,550.00	4,387.46	4,463.09	4,179.97	16.85	18.48	-18.50	476.72	442.28	34.43	13.845	0		
4,600.00	4,434.13	4,512.83	4,224.37	17.07	18.72	-18.43	481.79	446.91	34.88	13.813	0		
4,650.00	4,480.80	4,562.57	4,268.78	17.28	18.96	-18.36	486.86	451.53	35.33	13.781	0		
4,700.00	4,527.47	4,612.31	4,313.18	17.50	19.21	-18.30	491.93	456.15	35.77	13.751	0		
4,750.00	4,574.14	4,662.05	4,357.59	17.71	19.45	-18.23	497.00	460.77	36.22	13.720	0		
4,800.00	4,620.81	4,711.79	4,401.99	17.93	19.70	-18.17	502.07	465.40	36.67	13.691	0		
4,850.00	4,667.48	4,761.53	4,446.39	18.15	19.94	-18.11	507.14	470.02	37.12	13.662	0		
4,900.00	4,714.15	4,811.26	4,490.80	18.36	20.18	-18.05	512.21	474.65	37.57	13.634	0		
4,950.00	4,760.82	4,861.00	4,535.20	18.58	20.43	-17.99	517.29	479.27	38.02	13.606	0		
5,000.00	4,807.49	4,910.74	4,579.61	18.79	20.67	-17.93	522.36	483.89	38.47	13.579	0		
5,050.00	4,854.16	4,960.48	4,624.01	19.01	20.92	-17.87	527.44	488.52	38.92	13.552	0		
5,100.00	4,900.83	5,010.22	4,668.42	19.23	21.16	-17.82	532.51	493.14	39.37	13.526	0		
5,150.00	4,947.50	5,059.96	4,712.82	19.45	21.40	-17.76	537.59	497.77	39.82	13.501	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													OUTRIDER 27 FED - O27F 512H - O27F 512H - PLAN 6		Offset Site Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													Offset Well Error:	0.00 usft		
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision				
5,200.00	4,994.18	5,109.70	4,757.22	19.66	21.65	-17.71	542.66	502.39	40.27	13.476	0					
5,250.00	5,040.85	5,159.44	4,801.63	19.88	21.89	-17.66	547.74	507.02	40.72	13.451	0					
5,300.00	5,087.52	5,209.18	4,846.03	20.10	22.14	-17.60	552.82	511.65	41.17	13.427	0					
5,350.00	5,134.19	5,258.92	4,890.44	20.31	22.38	-17.55	557.89	516.27	41.62	13.403	0					
5,400.00	5,180.86	5,308.66	4,934.84	20.53	22.63	-17.50	562.97	520.90	42.07	13.380	0					
5,450.00	5,227.53	5,358.40	4,979.25	20.75	22.87	-17.46	568.05	525.52	42.53	13.357	0					
5,500.00	5,274.20	5,408.13	5,023.65	20.97	23.12	-17.41	573.13	530.15	42.98	13.335	0					
5,550.00	5,320.87	5,457.87	5,068.05	21.19	23.36	-17.36	578.21	534.78	43.43	13.313	0					
5,600.00	5,367.54	5,507.61	5,112.46	21.40	23.61	-17.31	583.29	539.40	43.88	13.292	0					
5,650.00	5,414.21	5,557.35	5,156.86	21.62	23.86	-17.27	588.37	544.03	44.34	13.271	0					
5,700.00	5,460.88	5,607.09	5,201.27	21.84	24.10	-17.22	593.45	548.66	44.79	13.250	0					
5,750.00	5,507.55	5,656.83	5,245.67	22.06	24.35	-17.18	598.53	553.29	45.24	13.230	0					
5,800.00	5,554.22	5,706.57	5,290.08	22.28	24.59	-17.14	603.61	557.92	45.69	13.210	0					
5,850.00	5,600.89	5,756.31	5,334.48	22.49	24.84	-17.09	608.69	562.54	46.15	13.190	0					
5,900.00	5,647.56	5,806.05	5,378.88	22.71	25.08	-17.05	613.77	567.17	46.60	13.171	0					
5,950.00	5,694.23	5,855.79	5,423.29	22.93	25.33	-17.01	618.85	571.80	47.05	13.152	0					
6,000.00	5,740.91	5,905.53	5,467.69	23.15	25.58	-16.97	623.94	576.43	47.51	13.134	0					
6,050.00	5,787.58	5,955.26	5,512.10	23.37	25.82	-16.93	629.02	581.06	47.96	13.115	0					
6,100.00	5,834.25	6,005.00	5,556.50	23.59	26.07	-16.89	634.10	585.69	48.41	13.098	0					
6,150.00	5,880.92	6,054.74	5,600.91	23.81	26.32	-16.85	639.18	590.32	48.87	13.080	0					
6,200.00	5,927.59	6,104.48	5,645.31	24.03	26.56	-16.81	644.27	594.95	49.32	13.063	0					
6,250.00	5,974.26	6,154.22	5,689.71	24.25	26.81	-16.78	649.35	599.57	49.78	13.046	0					
6,300.00	6,021.08	6,203.92	5,734.08	24.46	27.05	-16.76	654.83	604.59	50.24	13.034	0		SF			
6,350.00	6,068.20	6,253.51	5,778.35	24.68	27.30	-16.73	661.15	610.46	50.69	13.042	0					
6,400.00	6,115.60	6,302.98	5,822.52	24.89	27.54	-16.68	668.29	617.17	51.13	13.071	0					
6,450.00	6,163.27	6,352.33	5,866.57	25.10	27.79	-16.62	676.27	624.72	51.54	13.120	0					
6,500.00	6,211.20	6,401.52	5,910.49	25.30	28.03	-16.54	685.07	633.12	51.94	13.188	0					
6,550.00	6,259.37	6,450.56	5,954.27	25.51	28.28	-16.45	694.69	642.37	52.33	13.276	0					
6,600.00	6,307.77	6,499.42	5,997.88	25.71	28.52	-16.35	705.14	652.45	52.69	13.383	0					
6,650.00	6,356.38	6,548.08	6,041.33	25.90	28.76	-16.24	716.41	663.38	53.04	13.508	0					
6,700.00	6,405.18	6,596.54	6,084.59	26.10	29.00	-16.12	728.51	675.15	53.36	13.652	0					
6,750.00	6,454.17	6,644.78	6,127.65	26.28	29.24	-15.99	741.42	687.75	53.67	13.814	0					
6,800.00	6,503.33	6,692.78	6,170.51	26.47	29.48	-15.86	755.16	701.19	53.96	13.994	0					
6,850.00	6,552.63	6,740.53	6,213.14	26.65	29.72	-15.71	769.70	715.47	54.23	14.193	0					
6,900.00	6,602.08	6,788.01	6,255.53	26.84	29.95	-15.57	785.06	730.58	54.48	14.410	0					
6,950.00	6,651.64	6,835.22	6,297.67	27.01	30.19	-15.42	801.24	746.52	54.71	14.645	0					
7,000.00	6,701.32	6,882.13	6,339.55	27.19	30.42	-15.26	818.21	763.29	54.92	14.897	0					
7,050.00	6,751.08	6,928.73	6,381.15	27.36	30.65	-15.11	835.99	780.88	55.11	15.169	0					
7,100.00	6,800.93	6,975.01	6,422.47	27.53	30.88	-14.95	854.57	799.29	55.28	15.458	0					
7,150.00	6,850.83	7,020.95	6,463.48	27.69	31.11	-14.79	873.95	818.52	55.43	15.766	0					
7,200.00	6,900.78	7,066.54	6,504.18	27.86	31.33	-14.63	894.12	838.56	55.56	16.092	0					
7,250.00	6,950.76	7,111.77	6,544.56	28.01	31.56	-14.47	915.07	859.41	55.67	16.439	0					
7,300.00	7,000.76	7,156.62	6,584.60	28.17	31.78	-14.32	936.81	881.06	55.75	16.803	0					
7,350.00	7,050.76	7,201.26	6,624.45	28.32	32.00	-14.17	958.97	902.90	56.07	17.103	0					
7,400.00	7,100.76	7,245.89	6,664.30	28.47	32.23	-14.02	981.16	924.76	56.40	17.396	0					
7,450.00	7,150.76	7,290.53	6,704.15	28.62	32.45	-13.87	1,003.36	946.62	56.73	17.685	0					
7,500.00	7,200.76	7,335.17	6,744.00	28.77	32.67	-13.72	1,025.57	968.50	57.07	17.971	0					
7,550.00	7,250.76	7,379.81	6,783.85	28.93	32.89	-13.57	1,047.80	990.39	57.40	18.254	0					
7,600.00	7,300.76	7,424.44	6,823.70	29.08	33.11	-13.42	1,070.03	1,012.30	57.74	18.533	0					
7,650.00	7,350.76	7,469.08	6,863.55	29.23	33.34	-13.27	1,092.29	1,034.21	58.07	18.809	0					
7,700.00	7,400.76	7,513.72	6,903.40	29.39	33.56	-13.12	1,114.55	1,056.14	58.41	19.082	0					
7,750.00	7,450.76	7,558.36	6,943.24	29.54	33.78	-12.97	1,136.82	1,078.07	58.75	19.351	0					

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 512H - O27F 512H - PLAN 6													Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Riskd Separation Factor	Probability of Collision		
7,800.00	7,500.76	7,602.99	6,983.09	29.69	34.00	86.38	1,159.10	1,100.02	59.09	19.617	0			
7,850.00	7,550.76	7,647.63	7,022.94	29.85	34.22	86.56	1,181.39	1,121.97	59.42	19.880	0			
7,900.00	7,600.76	7,692.27	7,062.79	30.00	34.45	86.73	1,203.70	1,143.93	59.76	20.141	0			
7,950.00	7,650.76	7,736.90	7,102.64	30.16	34.67	86.89	1,226.00	1,165.90	60.11	20.398	0			
8,000.00	7,700.76	7,781.54	7,142.49	30.31	34.89	87.05	1,248.32	1,187.87	60.45	20.652	0			
8,050.00	7,750.76	7,826.18	7,182.34	30.47	35.11	87.21	1,270.65	1,209.86	60.79	20.903	0			
8,100.00	7,800.76	7,870.82	7,222.19	30.62	35.34	87.35	1,292.98	1,231.85	61.13	21.151	0			
8,150.00	7,850.76	7,915.45	7,262.04	30.78	35.56	87.50	1,315.31	1,253.84	61.47	21.396	0			
8,200.00	7,900.76	7,960.09	7,301.89	30.93	35.78	87.64	1,337.66	1,275.84	61.82	21.639	0			
8,250.00	7,950.76	8,004.73	7,341.74	31.09	36.00	87.77	1,360.01	1,297.85	62.16	21.879	0			
8,300.00	8,000.76	8,070.19	7,400.33	31.25	36.33	87.96	1,382.20	1,319.60	62.59	22.082	0			
8,350.00	8,050.76	8,157.74	7,479.65	31.40	36.75	88.18	1,403.20	1,340.08	63.12	22.232	0			
8,400.00	8,100.76	8,247.76	7,562.35	31.56	37.17	88.38	1,422.80	1,359.16	63.65	22.355	0			
8,450.00	8,150.76	8,340.17	7,648.37	31.72	37.58	88.57	1,440.95	1,376.77	64.18	22.451	0			
8,500.00	8,200.76	8,434.86	7,737.59	31.88	37.99	88.73	1,457.58	1,392.86	64.72	22.521	0			
8,550.00	8,250.76	8,531.71	7,829.87	32.03	38.39	88.88	1,472.64	1,407.38	65.26	22.566	0			
8,600.00	8,300.76	8,630.56	7,925.03	32.19	38.78	89.01	1,486.08	1,420.28	65.80	22.585	0			

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - O27F 605H OH												Offset Well Error:	0.00 usft
Survey Program: 171-XOMR2_OWSG MWD+IFR1+MS, 1192-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
1,123.00	1,122.40	1,123.00	1,122.40	0.00	0.00	-62.23	0.04				0		Level 1 , ES, SF
1,150.00	1,149.35	1,150.00	1,149.35	0.10	0.05	-66.29	0.11	-0.04	0.15	0.747	0		
1,200.00	1,199.28	1,199.99	1,199.26	0.28	0.13	-88.29	0.92	0.51	0.41	2.262	0		
1,250.00	1,249.23	1,249.96	1,249.17	0.45	0.15	-107.32	2.46	1.86	0.60	4.102	0		
1,300.00	1,299.20	1,299.89	1,299.06	0.63	0.18	-138.14	4.87	4.07	0.80	6.088	0		
1,350.00	1,349.18	1,349.78	1,348.92	0.80	0.22	-163.02	7.47	6.45	1.01	7.363	0		
1,400.00	1,399.17	1,399.59	1,398.68	0.97	0.26	136.87	10.54	9.31	1.23	8.583	0		
1,450.00	1,449.17	1,449.39	1,448.38	1.13	0.31	98.77	13.39	11.94	1.44	9.278	0		
1,500.00	1,499.14	1,499.20	1,498.02	1.30	0.37	93.71	16.73	15.06	1.67	10.017	0		
1,550.00	1,549.09	1,549.07	1,547.70	1.47	0.43	91.73	20.25	18.36	1.90	10.669	0		
1,600.00	1,599.00	1,580.00	1,578.51	1.64	0.47	82.43	30.20	28.11	2.09	14.433	0		
1,650.00	1,648.85	1,580.00	1,578.51	1.81	0.47	74.76	73.71	71.46	2.25	32.823	0		
1,700.00	1,698.64	1,580.00	1,578.51	1.98	0.47	67.53	122.18	119.79	2.39	51.137	0		
1,750.00	1,748.34	1,580.00	1,578.51	2.15	0.47	60.41	171.45	168.93	2.52	68.050	0		
1,800.00	1,797.95	1,580.00	1,578.51	2.32	0.47	53.48	220.97	218.34	2.63	84.022	0		
1,850.00	1,847.45	1,580.00	1,578.51	2.49	0.47	46.99	270.60	267.88	2.72	99.604	0		
1,900.00	1,896.82	1,580.00	1,578.51	2.66	0.47	41.12	320.27	317.51	2.75	116.334	0		
1,950.00	1,946.05	1,580.00	1,578.51	2.84	0.47	35.99	369.95	366.99	2.96	125.104	0		
2,000.00	1,995.12	1,580.00	1,578.51	3.01	0.47	31.59	419.63	416.40	3.23	130.006	0		
2,050.00	2,044.02	1,580.00	1,578.51	3.18	0.47	27.86	469.30	465.82	3.48	134.896	0		
2,100.00	2,092.73	1,580.00	1,578.51	3.36	0.47	24.72	518.94	515.23	3.70	140.123	0		
2,150.00	2,141.24	1,580.00	1,578.51	3.53	0.47	22.08	568.55	564.64	3.91	145.380	0		
2,200.00	2,189.53	1,580.00	1,578.51	3.71	0.47	19.84	618.12	614.00	4.12	150.048	0		
2,250.00	2,237.60	1,580.00	1,578.51	3.89	0.47	17.95	667.66	663.33	4.32	154.466	0		
2,300.00	2,285.41	1,580.00	1,578.51	4.07	0.47	16.33	717.14	712.62	4.52	158.527	0		
2,350.00	2,332.97	1,580.00	1,578.51	4.25	0.47	14.94	766.58	761.86	4.72	162.377	0		
2,400.00	2,380.25	1,580.00	1,578.51	4.43	0.47	13.74	815.96	811.04	4.91	166.036	0		
2,450.00	2,427.24	1,580.00	1,578.51	4.62	0.47	12.69	865.28	860.17	5.11	169.347	0		
2,500.00	2,473.96	1,580.00	1,578.51	4.81	0.47	12.17	914.55	909.24	5.30	172.486	0		
2,550.00	2,520.63	1,580.00	1,578.51	5.00	0.47	12.17	963.87	958.37	5.50	175.391	0		
2,600.00	2,567.30	1,580.00	1,578.51	5.19	0.47	12.17	1,013.26	1,007.57	5.69	178.074	0		
2,650.00	2,613.97	1,580.00	1,578.51	5.38	0.47	12.17	1,062.71	1,056.82	5.89	180.548	0		
2,700.00	2,660.64	1,580.00	1,578.51	5.58	0.47	12.17	1,112.20	1,106.12	6.08	182.849	0		
2,750.00	2,707.32	1,580.00	1,578.51	5.77	0.47	12.17	1,161.74	1,155.46	6.28	184.975	0		
2,800.00	2,753.99	1,580.00	1,578.51	5.97	0.47	12.17	1,211.32	1,204.84	6.48	186.964	0		
2,850.00	2,800.66	1,580.00	1,578.51	6.17	0.47	12.17	1,260.93	1,254.25	6.68	188.805	0		
2,900.00	2,847.33	1,580.00	1,578.51	6.37	0.47	12.17	1,310.57	1,303.69	6.88	190.535	0		
2,950.00	2,894.00	1,580.00	1,578.51	6.57	0.47	12.17	1,360.24	1,353.16	7.08	192.141	0		
3,000.00	2,940.67	1,580.00	1,578.51	6.77	0.47	12.17	1,409.93	1,402.65	7.28	193.655	0		
3,050.00	2,987.34	1,580.00	1,578.51	6.97	0.47	12.17	1,459.64	1,452.16	7.48	195.064	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0		
50.00	50.00	50.00	50.00	0.04	0.06	180.00	0.06	-0.04	0.10	0.582	0		Level 1
100.00	100.00	100.00	100.00	0.13	0.13	180.00	0.23	-0.02	0.25	0.913	0		Level 1
150.00	150.00	150.00	150.00	0.22	0.30	180.00	0.52	0.00	0.52	0.993	0		Level 1
200.00	200.00	200.00	200.00	0.36	0.48	-172.22	0.91	0.07	0.84	1.085	0		Level 2
250.00	250.00	250.00	250.00	0.54	0.66	178.64	1.36	0.16	1.20	1.137	0		Level 2
300.00	299.99	299.99	299.99	0.71	0.84	164.55	1.78	0.23	1.56	1.145	0		Level 2
350.00	349.99	349.99	349.99	0.89	1.02	142.06	2.13	0.22	1.91	1.116	0		Level 2
400.00	399.99	399.99	399.99	1.07	1.20	110.93	2.33	0.06	2.27	1.027	0		Level 2
450.00	449.99	449.99	449.99	1.24	1.38	105.13	2.44	-0.18	2.62	0.933	0		Level 1
500.00	499.99	499.99	499.99	1.42	1.56	109.39	2.60	-0.37	2.97	0.875	0		Level 1
550.00	549.98	549.98	549.98	1.59	1.74	117.39	2.86	-0.47	3.33	0.860	0		Level 1
600.00	599.98	599.98	599.98	1.77	1.92	126.25	3.27	-0.42	3.68	0.887	0		Level 1
650.00	649.97	649.97	649.97	1.94	2.10	136.82	3.92	-0.12	4.04	0.970	0		Level 1
700.00	699.95	699.95	699.95	2.12	2.28	146.54	4.92	0.52	4.39	1.119	0		Level 2
750.00	749.93	749.93	749.93	2.30	2.46	154.60	6.25	1.50	4.75	1.316	0		Level 3
800.00	799.90	799.90	799.90	2.47	2.63	159.67	7.89	2.79	5.10	1.546	0		
850.00	849.85	849.85	849.85	2.65	2.81	162.22	9.83	4.37	5.46	1.800	0		
900.00	899.80	899.80	899.80	2.83	2.99	165.15	12.07	6.25	5.82	2.075	0		
950.00	949.73	949.73	949.73	3.01	3.17	168.15	14.59	8.42	6.17	2.364	0		
1,000.00	999.65	999.65	999.65	3.19	3.35	170.90	17.40	10.87	6.53	2.665	0		
1,050.00	1,049.55	1,049.55	1,049.55	3.36	3.53	173.25	20.50	13.61	6.88	2.978	0		
1,100.00	1,099.44	1,099.44	1,099.44	3.54	3.71	174.40	23.75	16.51	7.24	3.280	0		
1,150.00	1,149.35	1,149.35	1,149.35	3.72	3.89	168.09	26.77	19.17	7.60	3.522	0		
1,200.00	1,199.28	1,199.28	1,199.28	3.90	4.07	152.85	29.28	21.32	7.96	3.679	0		
1,250.00	1,249.23	1,248.81	1,248.81	4.08	4.24	138.52	31.39	23.08	8.31	3.778	0		
1,300.00	1,299.20	1,298.26	1,298.24	4.25	4.41	115.52	33.54	24.88	8.66	3.874	0		
1,350.00	1,349.18	1,347.64	1,347.58	4.42	4.58	96.80	35.77	26.78	9.00	3.977	0		
1,400.00	1,399.17	1,396.97	1,396.82	4.59	4.75	42.77	38.02	28.68	9.33	4.074	0		
1,450.00	1,449.17	1,446.24	1,445.94	4.76	4.92	12.35	40.89	31.23	9.67	4.230	0		
1,500.00	1,499.14	1,495.43	1,494.91	4.92	5.09	15.13	43.90	33.90	10.00	4.391	0		
1,550.00	1,549.09	1,544.54	1,543.71	5.09	5.26	17.69	46.99	36.66	10.33	4.549	0		
1,600.00	1,599.00	1,593.57	1,592.34	5.26	5.43	11.12	50.20	39.55	10.66	4.710	0		
1,650.00	1,648.85	1,642.55	1,640.79	5.43	5.60	7.47	53.54	42.55	10.99	4.873	0		
1,700.00	1,698.64	1,691.46	1,689.05	5.60	5.77	5.37	56.97	45.65	11.31	5.036	0		
1,750.00	1,748.34	1,740.32	1,737.12	5.77	5.95	4.13	60.46	48.82	11.64	5.195	0		
1,800.00	1,797.95	1,789.11	1,784.97	5.94	6.12	3.37	63.99	52.03	11.96	5.351	0		
1,850.00	1,847.45	1,837.85	1,832.59	6.11	6.29	2.88	67.55	55.27	12.28	5.501	0		
1,900.00	1,896.82	1,886.53	1,879.98	6.29	6.47	2.56	71.14	58.54	12.60	5.646	0		
1,950.00	1,946.05	1,935.15	1,927.11	6.46	6.65	2.33	74.73	61.81	12.92	5.785	0		
2,000.00	1,995.12	1,983.72	1,973.98	6.63	6.82	2.15	78.32	65.08	13.23	5.918	0		
2,050.00	2,044.02	2,032.22	2,020.57	6.80	7.00	1.99	81.90	68.35	13.55	6.044	0		
2,100.00	2,092.73	2,080.68	2,066.88	6.98	7.18	1.83	85.47	71.61	13.86	6.167	0		
2,150.00	2,141.24	2,129.07	2,112.88	7.15	7.36	1.68	89.03	74.86	14.17	6.284	0		
2,200.00	2,189.53	2,178.40	2,159.56	7.33	7.55	1.52	92.40	77.92	14.48	6.379	0		
2,250.00	2,237.60	2,228.33	2,206.79	7.51	7.74	1.34	94.96	80.16	14.80	6.417	0		
2,300.00	2,285.41	2,278.30	2,254.06	7.69	7.93	1.16	96.66	81.54	15.11	6.396	0		
2,350.00	2,332.97	2,328.30	2,301.34	7.87	8.12	0.95	97.48	82.06	15.43	6.319	0		
2,400.00	2,380.25	2,378.29	2,348.64	8.05	8.31	0.74	97.44	81.71	15.74	6.192	0		
2,450.00	2,427.24	2,428.29	2,395.93	8.24	8.51	0.50	96.53	80.49	16.05	6.015	0		
2,500.00	2,473.96	2,478.26	2,443.20	8.42	8.70	0.36	94.84	78.45	16.39	5.787	0		
2,550.00	2,520.63	2,528.22	2,490.46	8.61	8.90	0.37	93.01	76.24	16.77	5.547	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
2,600.00	2,567.30	2,578.19	2,537.72	8.80	9.09	0.37	91.18	74.03	17.15	5.317	0		
2,650.00	2,613.97	2,628.16	2,584.99	8.99	9.29	0.37	89.35	71.82	17.54	5.096	0		
2,700.00	2,660.64	2,678.12	2,632.25	9.18	9.49	0.37	87.52	69.60	17.92	4.884	0		
2,750.00	2,707.32	2,728.09	2,679.52	9.38	9.69	0.38	85.69	67.38	18.31	4.680	0		
2,800.00	2,753.99	2,778.06	2,726.78	9.57	9.89	0.38	83.86	65.16	18.70	4.484	0		
2,850.00	2,800.66	2,828.02	2,774.04	9.77	10.09	0.38	82.03	62.94	19.09	4.296	0		
2,900.00	2,847.33	2,877.99	2,821.31	9.97	10.29	0.39	80.21	60.72	19.49	4.116	0		
2,950.00	2,894.00	2,927.96	2,868.57	10.17	10.49	0.39	78.38	58.49	19.88	3.942	0		
3,000.00	2,940.67	2,977.92	2,915.84	10.37	10.70	0.39	76.55	56.26	20.28	3.774	0		
3,050.00	2,987.34	3,027.89	2,963.10	10.57	10.90	0.40	74.72	54.04	20.68	3.613	0		
3,100.00	3,034.01	3,077.86	3,010.36	10.77	11.10	0.40	72.89	51.81	21.08	3.458	0		
3,150.00	3,080.68	3,127.82	3,057.63	10.97	11.30	0.40	71.06	49.58	21.48	3.308	0		
3,200.00	3,127.35	3,177.79	3,104.89	11.17	11.51	0.41	69.23	47.34	21.88	3.163	0		
3,250.00	3,174.02	3,227.75	3,152.16	11.38	11.71	0.41	67.40	45.11	22.29	3.024	0		
3,300.00	3,220.69	3,277.72	3,199.42	11.58	11.92	0.42	65.57	42.88	22.69	2.889	0		
3,350.00	3,267.36	3,327.69	3,246.69	11.79	12.12	0.42	63.74	40.64	23.10	2.759	0		
3,400.00	3,314.03	3,377.65	3,293.95	11.99	12.33	0.43	61.91	38.41	23.51	2.634	0		
3,450.00	3,360.70	3,427.62	3,341.21	12.20	12.53	0.43	60.08	36.17	23.91	2.512	0		
3,500.00	3,407.37	3,477.59	3,388.48	12.41	12.74	0.44	58.25	33.93	24.32	2.395	0		
3,550.00	3,454.05	3,527.55	3,435.74	12.62	12.94	0.44	56.42	31.69	24.73	2.281	0		
3,600.00	3,500.72	3,577.52	3,483.01	12.82	13.15	0.45	54.59	29.45	25.14	2.171	0		
3,650.00	3,547.39	3,627.49	3,530.27	13.03	13.36	0.46	52.76	27.21	25.55	2.065	0		
3,700.00	3,594.06	3,677.45	3,577.53	13.24	13.56	0.46	50.93	24.97	25.96	1.962	0		
3,750.00	3,640.73	3,727.42	3,624.80	13.45	13.77	0.47	49.10	22.73	26.38	1.862	0		
3,800.00	3,687.40	3,777.39	3,672.06	13.66	13.98	0.48	47.27	20.49	26.79	1.765	0		
3,850.00	3,734.07	3,827.35	3,719.33	13.87	14.19	0.49	45.45	18.24	27.20	1.671	0		
3,900.00	3,780.74	3,877.32	3,766.59	14.08	14.39	0.50	43.62	16.00	27.62	1.579	0		
3,950.00	3,827.41	3,927.29	3,813.85	14.29	14.60	0.51	41.79	13.76	28.03	1.491	0		Level 3
4,000.00	3,874.08	3,977.25	3,861.12	14.51	14.81	0.52	39.96	11.51	28.44	1.405	0		Level 3
4,050.00	3,920.75	4,027.22	3,908.38	14.72	15.02	0.54	38.13	9.27	28.86	1.321	0		Level 3
4,100.00	3,967.42	4,077.19	3,955.65	14.93	15.23	0.55	36.30	7.02	29.28	1.240	0		Level 2
4,150.00	4,014.09	4,127.15	4,002.91	15.14	15.44	0.57	34.47	4.78	29.69	1.161	0		Level 2
4,200.00	4,060.76	4,177.12	4,050.18	15.36	15.65	0.59	32.64	2.53	30.11	1.084	0		Level 2
4,250.00	4,107.43	4,227.09	4,097.44	15.57	15.85	0.61	30.81	0.28	30.53	1.009	0		Level 2
4,300.00	4,154.10	4,277.05	4,144.70	15.78	16.06	0.63	28.98	-1.96	30.94	0.937	0		Level 1
4,350.00	4,200.78	4,327.02	4,191.97	16.00	16.27	0.66	27.15	-4.21	31.36	0.866	0		Level 1
4,400.00	4,247.45	4,376.98	4,239.23	16.21	16.48	0.69	25.32	-6.46	31.78	0.797	0		Level 1
4,450.00	4,294.12	4,426.95	4,286.50	16.42	16.69	0.72	23.49	-8.71	32.20	0.730	0		Level 1
4,500.00	4,340.79	4,476.92	4,333.76	16.64	16.90	0.76	21.66	-10.96	32.62	0.664	0		Level 1
4,550.00	4,387.46	4,526.88	4,381.02	16.85	17.11	0.81	19.83	-13.21	33.04	0.600	0		Level 1
4,600.00	4,434.13	4,576.85	4,428.29	17.07	17.32	0.86	18.00	-15.45	33.46	0.538	0		Level 1
4,650.00	4,480.80	4,626.82	4,475.55	17.28	17.53	0.93	16.17	-17.70	33.88	0.477	0		Level 1
4,700.00	4,527.47	4,676.78	4,522.82	17.50	17.74	1.02	14.35	-19.95	34.30	0.418	0		Level 1
4,750.00	4,574.14	4,726.75	4,570.08	17.71	17.95	1.13	12.52	-22.20	34.72	0.361	0		Level 1
4,800.00	4,620.81	4,776.72	4,617.34	17.93	18.16	1.28	10.69	-24.45	35.14	0.304	0		Level 1
4,850.00	4,667.48	4,826.68	4,664.61	18.15	18.37	1.50	8.86	-26.70	35.56	0.249	0		Level 1
4,900.00	4,714.15	4,876.65	4,711.87	18.36	18.58	1.82	7.03	-28.95	35.98	0.195	0		Level 1
4,950.00	4,760.82	4,926.62	4,759.14	18.58	18.80	2.38	5.20	-31.19	36.39	0.143	0		Level 1
5,000.00	4,807.49	4,976.58	4,806.40	18.79	19.01	3.53	3.37	-33.43	36.81	0.092	0		Level 1
5,050.00	4,854.16	5,026.55	4,853.67	19.01	19.22	7.42	1.55	-35.66	37.21	0.042	0		Level 1
5,092.03	4,893.40	5,068.55	4,893.40	19.19	19.39	90.24	0.19	-38.36	38.55	0.005	0		Level 1
5,100.00	4,900.83	5,076.52	4,900.93	19.23	19.43	146.69	0.35	-37.87	38.22	0.009	0		Level 1

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
5,150.00	4,947.50	5,126.48	4,948.19	19.45	19.64	175.04	2.13	-36.03	38.16	0.056	0		Level 1
5,200.00	4,994.18	5,176.45	4,995.46	19.66	19.85	177.44	3.96	-34.60	38.56	0.103	0		Level 1
5,250.00	5,040.85	5,226.42	5,042.72	19.88	20.06	178.33	5.78	-33.19	38.97	0.148	0		Level 1
5,300.00	5,087.52	5,276.38	5,089.99	20.10	20.27	178.79	7.61	-31.78	39.39	0.193	0		Level 1
5,350.00	5,134.19	5,326.35	5,137.25	20.31	20.48	179.07	9.44	-30.37	39.81	0.237	0		Level 1
5,400.00	5,180.86	5,376.32	5,184.51	20.53	20.70	179.26	11.27	-28.96	40.23	0.280	0		Level 1
5,450.00	5,227.53	5,426.28	5,231.78	20.75	20.91	179.40	13.10	-27.55	40.65	0.322	0		Level 1
5,500.00	5,274.20	5,476.25	5,279.04	20.97	21.12	179.51	14.93	-26.15	41.08	0.363	0		Level 1
5,550.00	5,320.87	5,526.21	5,326.31	21.19	21.33	179.59	16.76	-24.74	41.50	0.404	0		Level 1
5,600.00	5,367.54	5,576.18	5,373.57	21.40	21.54	179.65	18.59	-23.34	41.92	0.443	0		Level 1
5,650.00	5,414.21	5,626.15	5,420.83	21.62	21.75	179.70	20.42	-21.93	42.35	0.482	0		Level 1
5,700.00	5,460.88	5,676.11	5,468.10	21.84	21.97	179.75	22.25	-20.53	42.77	0.520	0		Level 1
5,750.00	5,507.55	5,726.08	5,515.36	22.06	22.18	179.79	24.08	-19.12	43.20	0.557	0		Level 1
5,800.00	5,554.22	5,776.05	5,562.63	22.28	22.39	179.82	25.90	-17.72	43.62	0.594	0		Level 1
5,850.00	5,600.89	5,826.01	5,609.89	22.49	22.60	179.85	27.73	-16.31	44.05	0.630	0		Level 1
5,900.00	5,647.56	5,875.98	5,657.15	22.71	22.81	179.87	29.56	-14.91	44.47	0.665	0		Level 1
5,950.00	5,694.23	5,925.95	5,704.42	22.93	23.03	179.89	31.39	-13.51	44.90	0.699	0		Level 1
6,000.00	5,740.91	5,975.91	5,751.68	23.15	23.24	179.91	33.22	-12.10	45.32	0.733	0		Level 1
6,050.00	5,787.58	6,025.88	5,798.95	23.37	23.45	179.93	35.05	-10.70	45.75	0.766	0		Level 1
6,100.00	5,834.25	6,075.85	5,846.21	23.59	23.66	179.95	36.88	-9.29	46.18	0.799	0		Level 1
6,150.00	5,880.92	6,125.81	5,893.48	23.81	23.87	179.96	38.71	-7.89	46.60	0.831	0		Level 1
6,200.00	5,927.59	6,175.78	5,940.74	24.03	24.09	179.97	40.54	-6.49	47.03	0.862	0		Level 1
6,250.00	5,974.26	6,225.75	5,988.00	24.25	24.30	179.99	42.37	-5.09	47.45	0.893	0		Level 1
6,300.00	6,021.08	6,275.73	6,035.28	24.46	24.51	180.00	43.78	-4.16	47.94	0.913	0		Level 1
6,350.00	6,068.20	6,325.72	6,082.57	24.68	24.72	-179.99	44.32	-4.10	48.42	0.915	0		Level 1
6,400.00	6,115.60	6,375.72	6,129.87	24.89	24.94	-179.98	43.98	-4.90	48.88	0.900	0		Level 1
6,450.00	6,163.27	6,425.70	6,177.15	25.10	25.15	-179.97	42.77	-6.55	49.32	0.867	0		Level 1
6,500.00	6,211.20	6,475.44	6,224.21	25.30	25.36	-179.96	40.73	-9.01	49.75	0.819	0		Level 1
6,550.00	6,259.37	6,524.71	6,271.03	25.51	25.57	-179.95	38.48	-11.67	50.15	0.767	0		Level 1
6,600.00	6,307.77	6,574.01	6,318.14	25.71	25.77	-179.93	36.22	-14.32	50.54	0.717	0		Level 1
6,650.00	6,356.38	6,623.36	6,365.54	25.90	25.97	-179.92	33.94	-16.97	50.91	0.667	0		Level 1
6,700.00	6,405.18	6,672.74	6,413.20	26.10	26.17	-179.90	31.66	-19.61	51.26	0.618	0		Level 1
6,750.00	6,454.17	6,722.16	6,461.12	26.28	26.37	-179.88	29.36	-22.24	51.60	0.569	0		Level 1
6,800.00	6,503.33	6,771.62	6,509.27	26.47	26.56	-179.86	27.05	-24.86	51.91	0.521	0		Level 1
6,850.00	6,552.63	6,821.12	6,557.65	26.65	26.75	-179.83	24.74	-27.47	52.21	0.474	0		Level 1
6,900.00	6,602.08	6,870.66	6,606.25	26.84	26.94	-179.80	22.42	-30.07	52.49	0.427	0		Level 1
6,950.00	6,651.64	6,920.24	6,655.04	27.01	27.13	-179.77	20.08	-32.66	52.74	0.381	0		Level 1
7,000.00	6,701.32	6,969.85	6,704.01	27.19	27.31	-179.72	17.74	-35.24	52.98	0.335	0		Level 1
7,050.00	6,751.08	7,019.51	6,753.16	27.36	27.49	-179.67	15.40	-37.80	53.20	0.289	0		Level 1
7,100.00	6,800.93	7,069.21	6,802.46	27.53	27.66	-179.59	13.05	-40.35	53.40	0.244	0		Level 1
7,150.00	6,850.83	7,118.95	6,851.90	27.69	27.84	-179.49	10.69	-42.89	53.58	0.200	0		Level 1
7,200.00	6,900.78	7,168.73	6,901.47	27.86	28.01	-179.33	8.33	-45.41	53.74	0.155	0		Level 1
7,250.00	6,950.76	7,218.55	6,951.15	28.01	28.18	-179.05	5.97	-47.90	53.87	0.111	0		Level 1
7,300.00	7,000.76	7,268.41	7,000.93	28.17	28.34	-178.40	3.60	-50.38	53.98	0.067	0		Level 1
7,350.00	7,050.76	7,318.32	7,050.81	28.32	28.50	-77.97	1.63	-52.63	54.26	0.030	0		Level 1
7,400.00	7,100.76	7,368.29	7,100.76	28.47	28.66	-70.59	0.54	-54.00	54.54	0.010	0		Level 1
7,450.00	7,150.76	7,418.29	7,150.76	28.62	28.82	-61.08	0.29	-54.64	54.94	0.005	0		Level 1
7,500.00	7,200.76	7,468.29	7,200.76	28.77	28.97	-61.08	0.29	-54.95	55.24	0.005	0		Level 1
7,550.00	7,250.76	7,518.29	7,250.76	28.93	29.12	-61.08	0.29	-55.25	55.55	0.005	0		Level 1
7,600.00	7,300.76	7,568.29	7,300.76	29.08	29.28	-61.08	0.29	-55.56	55.85	0.005	0		Level 1
7,650.00	7,350.76	7,618.29	7,350.76	29.23	29.43	-61.08	0.29	-55.87	56.16	0.005	0		Level 1
7,700.00	7,400.76	7,668.29	7,400.76	29.39	29.59	-61.08	0.29	-56.17	56.46	0.005	0		Level 1

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
7,750.00	7,450.76	7,718.29	7,450.76	29.54	29.74	-61.08	0.29	-56.48	56.77	0.005	0		Level 1
7,800.00	7,500.76	7,768.29	7,500.76	29.69	29.90	-61.08	0.29	-56.79	57.08	0.005	0		Level 1
7,850.00	7,550.76	7,818.29	7,550.76	29.85	30.05	-61.08	0.29	-57.10	57.39	0.005	0		Level 1
7,900.00	7,600.76	7,868.29	7,600.76	30.00	30.21	-61.08	0.29	-57.41	57.70	0.005	0		Level 1
7,950.00	7,650.76	7,918.29	7,650.76	30.16	30.36	-61.08	0.29	-57.72	58.01	0.005	0		Level 1
8,000.00	7,700.76	7,968.29	7,700.76	30.31	30.52	-61.08	0.29	-58.03	58.32	0.005	0		Level 1
8,050.00	7,750.76	8,018.29	7,750.76	30.47	30.67	-61.08	0.29	-58.34	58.63	0.005	0		Level 1
8,100.00	7,800.76	8,068.29	7,800.76	30.62	30.83	-61.08	0.29	-58.65	58.94	0.005	0		Level 1
8,150.00	7,850.76	8,118.29	7,850.76	30.78	30.99	-61.08	0.29	-58.96	59.25	0.005	0		Level 1
8,200.00	7,900.76	8,168.29	7,900.76	30.93	31.14	-61.08	0.29	-59.27	59.56	0.005	0		Level 1
8,250.00	7,950.76	8,218.29	7,950.76	31.09	31.30	-61.08	0.29	-59.59	59.88	0.005	0		Level 1
8,300.00	8,000.76	8,268.29	8,000.76	31.25	31.46	-61.08	0.29	-59.90	60.19	0.005	0		Level 1
8,350.00	8,050.76	8,318.29	8,050.76	31.40	31.62	-61.08	0.29	-60.21	60.51	0.005	0		Level 1
8,400.00	8,100.76	8,368.29	8,100.76	31.56	31.77	-61.08	0.29	-60.53	60.82	0.005	0		Level 1
8,450.00	8,150.76	8,418.29	8,150.76	31.72	31.93	-61.08	0.29	-60.84	61.13	0.005	0		Level 1
8,500.00	8,200.76	8,468.29	8,200.76	31.88	32.09	-61.08	0.29	-61.16	61.45	0.005	0		Level 1
8,550.00	8,250.76	8,518.29	8,250.76	32.03	32.25	-61.08	0.29	-61.47	61.77	0.005	0		Level 1
8,600.00	8,300.76	8,568.29	8,300.76	32.19	32.41	-61.08	0.29	-61.79	62.08	0.005	0		Level 1
8,650.00	8,350.76	8,618.29	8,350.76	32.35	32.57	-61.08	0.29	-62.11	62.40	0.005	0		Level 1
8,700.00	8,400.76	8,668.29	8,400.76	32.51	32.73	-61.08	0.29	-62.42	62.72	0.005	0		Level 1
8,750.00	8,450.76	8,718.29	8,450.76	32.67	32.89	-61.08	0.29	-62.74	63.03	0.005	0		Level 1
8,800.00	8,500.76	8,768.29	8,500.76	32.83	33.05	-61.08	0.29	-63.06	63.35	0.005	0		Level 1
8,850.00	8,550.76	8,818.29	8,550.76	32.98	33.21	-61.08	0.29	-63.38	63.67	0.005	0		Level 1
8,900.00	8,600.76	8,868.29	8,600.76	33.14	33.37	-61.08	0.29	-63.70	63.99	0.005	0		Level 1
8,950.00	8,650.76	8,918.29	8,650.76	33.30	33.53	-61.08	0.29	-64.02	64.31	0.005	0		Level 1
9,000.00	8,700.76	8,968.29	8,700.76	33.46	33.69	-61.08	0.29	-64.34	64.63	0.005	0		Level 1
9,050.00	8,750.76	9,018.29	8,750.76	33.62	33.85	-61.08	0.29	-64.66	64.95	0.004	0		Level 1
9,100.00	8,800.76	9,068.29	8,800.76	33.78	34.01	-61.08	0.29	-64.98	65.27	0.004	0		Level 1
9,150.00	8,850.76	9,118.29	8,850.76	33.94	34.17	-61.08	0.29	-65.30	65.59	0.004	0		Level 1
9,200.00	8,900.76	9,168.29	8,900.76	34.10	34.33	-61.08	0.29	-65.62	65.91	0.004	0		Level 1
9,250.00	8,950.76	9,218.29	8,950.76	34.26	34.49	-61.08	0.29	-65.94	66.24	0.004	0		Level 1
9,300.00	9,000.76	9,268.29	9,000.76	34.43	34.65	-61.08	0.29	-66.27	66.56	0.004	0		Level 1
9,350.00	9,050.76	9,318.29	9,050.76	34.59	34.81	-61.08	0.29	-66.59	66.88	0.004	0		Level 1
9,400.00	9,100.76	9,368.29	9,100.76	34.75	34.98	-61.08	0.29	-66.91	67.20	0.004	0		Level 1
9,450.00	9,150.76	9,418.29	9,150.76	34.91	35.14	-61.08	0.29	-67.23	67.53	0.004	0		Level 1
9,500.00	9,200.76	9,468.29	9,200.76	35.07	35.30	-61.08	0.29	-67.56	67.85	0.004	0		Level 1
9,550.00	9,250.76	9,518.29	9,250.76	35.23	35.46	-61.08	0.29	-67.88	68.17	0.004	0		Level 1
9,600.00	9,300.76	9,568.29	9,300.76	35.39	35.63	-61.08	0.29	-68.21	68.50	0.004	0		Level 1
9,650.00	9,350.76	9,618.29	9,350.76	35.56	35.79	-61.08	0.29	-68.53	68.82	0.004	0		Level 1
9,700.00	9,400.76	9,668.29	9,400.76	35.72	35.95	-61.08	0.29	-68.86	69.15	0.004	0		Level 1
9,750.00	9,450.76	9,718.29	9,450.76	35.88	36.11	-61.08	0.29	-69.18	69.47	0.004	0		Level 1
9,800.00	9,500.76	9,768.29	9,500.76	36.04	36.28	-61.08	0.29	-69.51	69.80	0.004	0		Level 1
9,850.00	9,550.76	9,818.29	9,550.76	36.21	36.44	-61.08	0.29	-69.83	70.12	0.004	0		Level 1
9,900.00	9,600.76	9,868.29	9,600.76	36.37	36.60	-61.08	0.29	-70.16	70.45	0.004	0		Level 1
9,950.00	9,650.76	9,918.29	9,650.76	36.53	36.77	-61.08	0.29	-70.49	70.78	0.004	0		Level 1
10,000.00	9,700.76	9,968.29	9,700.76	36.70	36.93	-61.08	0.29	-70.81	71.10	0.004	0		Level 1
10,050.00	9,750.76	10,018.29	9,750.76	36.86	37.10	-61.08	0.29	-71.14	71.43	0.004	0		Level 1
10,100.00	9,800.76	10,068.29	9,800.76	37.02	37.26	-61.08	0.29	-71.47	71.76	0.004	0		Level 1
10,150.00	9,850.76	10,118.29	9,850.76	37.19	37.42	-61.08	0.29	-71.80	72.09	0.004	0		Level 1
10,200.00	9,900.76	10,168.29	9,900.76	37.35	37.59	-61.08	0.29	-72.12	72.42	0.004	0		Level 1
10,250.00	9,950.76	10,218.29	9,950.76	37.51	37.75	-61.08	0.29	-72.45	72.74	0.004	0		Level 1
10,300.00	10,000.76	10,268.29	10,000.76	37.68	37.92	-61.08	0.29	-72.78	73.07	0.004	0		Level 1

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H OH - PLAN 3													Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning	
10,350.00	10,050.76	10,318.29	10,050.76	37.84	38.08	-61.08	0.29	-73.11	73.40	0.004	0		Level 1	
10,400.00	10,100.76	10,368.29	10,100.76	38.01	38.25	-61.08	0.29	-73.44	73.73	0.004	0		Level 1	
10,450.00	10,150.76	10,418.29	10,150.76	38.17	38.41	-61.08	0.29	-73.77	74.06	0.004	0		Level 1	
10,500.00	10,200.76	10,468.29	10,200.76	38.34	38.58	-61.08	0.29	-74.10	74.39	0.004	0		Level 1	
10,550.00	10,250.76	10,518.29	10,250.76	38.50	38.74	-61.08	0.29	-74.43	74.72	0.004	0		Level 1	
10,600.00	10,300.76	10,568.29	10,300.76	38.66	38.91	-61.08	0.29	-74.76	75.05	0.004	0		Level 1	
10,650.00	10,350.76	10,618.29	10,350.76	38.83	39.07	-61.08	0.29	-75.09	75.38	0.004	0		Level 1	
10,700.00	10,400.76	10,668.29	10,400.76	38.99	39.24	-61.08	0.29	-75.42	75.71	0.004	0		Level 1	
10,750.00	10,450.76	10,718.29	10,450.76	39.16	39.41	-61.08	0.29	-75.75	76.04	0.004	0		Level 1	
10,800.00	10,500.76	10,768.29	10,500.76	39.33	39.57	-61.08	0.29	-76.08	76.37	0.004	0		Level 1	
10,850.00	10,550.76	10,818.29	10,550.76	39.49	39.74	-61.08	0.29	-76.41	76.71	0.004	0		Level 1	
10,900.00	10,600.76	10,868.29	10,600.76	39.66	39.90	-61.08	0.29	-76.75	77.04	0.004	0		Level 1	
10,950.00	10,650.76	10,918.29	10,650.76	39.82	40.07	-61.08	0.29	-77.08	77.37	0.004	0		Level 1	
11,000.00	10,700.76	10,968.29	10,700.76	39.99	40.24	-61.08	0.29	-77.41	77.70	0.004	0		Level 1	
11,050.00	10,750.76	11,018.29	10,750.76	40.15	40.40	-61.08	0.29	-77.74	78.03	0.004	0		Level 1	
11,100.00	10,800.76	11,068.29	10,800.76	40.32	40.57	-61.08	0.29	-78.07	78.37	0.004	0		Level 1	
11,150.00	10,850.76	11,118.29	10,850.76	40.49	40.74	-61.08	0.29	-78.41	78.70	0.004	0		Level 1	
11,200.00	10,900.76	11,168.29	10,900.76	40.65	40.90	-61.08	0.29	-78.74	79.03	0.004	0		Level 1	
11,250.00	10,950.76	11,218.29	10,950.76	40.82	41.07	-61.08	0.29	-79.07	79.37	0.004	0		Level 1	
11,300.00	11,000.76	11,268.29	11,000.76	40.99	41.24	-61.08	0.29	-79.41	79.70	0.004	0		Level 1	
11,350.00	11,050.76	11,318.29	11,050.76	41.15	41.40	-61.08	0.29	-79.74	80.03	0.004	0		Level 1	
11,400.00	11,100.76	11,368.29	11,100.76	41.32	41.57	-61.08	0.29	-80.08	80.37	0.004	0		Level 1	
11,450.00	11,150.76	11,418.29	11,150.76	41.49	41.74	-61.08	0.29	-80.41	80.70	0.004	0		Level 1	
11,500.00	11,200.76	11,468.29	11,200.76	41.65	41.91	-61.08	0.29	-80.74	81.04	0.004	0		Level 1	
11,550.00	11,250.76	11,518.29	11,250.76	41.82	42.07	-61.08	0.29	-81.08	81.37	0.004	0		Level 1	
11,600.00	11,300.76	11,568.29	11,300.76	41.99	42.24	-61.08	0.29	-81.41	81.71	0.004	0		Level 1	
11,650.00	11,350.76	11,618.29	11,350.76	42.15	42.41	-61.08	0.29	-81.75	82.04	0.004	0		Level 1	
11,700.00	11,400.76	11,668.29	11,400.76	42.32	42.58	-61.08	0.29	-82.08	82.38	0.004	0		Level 1	
11,750.00	11,450.76	11,718.29	11,450.76	42.49	42.74	-61.08	0.29	-82.42	82.71	0.004	0		Level 1	
11,800.00	11,500.76	11,768.29	11,500.76	42.66	42.91	-61.08	0.29	-82.76	83.05	0.004	0		Level 1	
11,850.00	11,550.76	11,818.29	11,550.76	42.82	43.08	-61.08	0.29	-83.09	83.38	0.004	0		Level 1	
11,900.00	11,600.76	11,868.29	11,600.76	42.99	43.25	-61.08	0.29	-83.43	83.72	0.003	0		Level 1	
11,950.00	11,650.76	11,918.29	11,650.76	43.16	43.42	-61.08	0.29	-83.76	84.06	0.003	0		Level 1	
12,000.00	11,700.76	11,968.29	11,700.76	43.33	43.58	-61.08	0.29	-84.10	84.39	0.003	0		Level 1 , ES, SF	

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - O27F 605H ST1													Offset Well Error:	0.00 usft
Survey Program: 171-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Riskd Separation Factor	Probability of Collision		
1,123.00	1,122.40	1,123.00	1,122.39	0.00	3.52	-15.77	0.16	-3.35	3.51	0.047	0		Level 1 , CC, ES, SF	
1,150.00	1,149.35	1,123.00	1,122.39	0.10	3.52	53.58	27.00	23.39	3.62	7.468	0			
1,200.00	1,199.28	1,123.00	1,122.39	0.28	3.52	105.33	77.00	73.21	3.79	20.309	0			
1,250.00	1,249.23	1,123.00	1,122.39	0.45	3.52	111.09	126.99	123.02	3.97	32.005	0			
1,300.00	1,299.20	1,123.00	1,122.39	0.63	3.52	92.62	176.98	172.84	4.14	42.781	0			
1,350.00	1,349.18	1,123.00	1,122.39	0.80	3.52	93.46	226.95	222.64	4.31	52.661	0			
1,400.00	1,399.17	1,123.00	1,122.39	0.97	3.52	51.14	276.92	272.44	4.48	61.879	0			
1,450.00	1,449.17	1,123.00	1,122.39	1.13	3.52	23.77	326.88	322.24	4.64	70.499	0			
1,500.00	1,499.14	1,123.00	1,122.39	1.30	3.52	16.46	376.82	372.03	4.79	78.645	0			
1,550.00	1,549.09	1,123.00	1,122.39	1.47	3.52	12.09	426.74	421.80	4.95	86.278	0			
1,600.00	1,599.00	1,123.00	1,122.39	1.64	3.52	9.05	476.64	471.53	5.11	93.352	0			
1,650.00	1,648.85	1,123.00	1,122.39	1.81	3.52	7.43	526.50	521.23	5.27	99.959	0			
1,700.00	1,698.64	1,123.00	1,122.39	1.98	3.52	6.48	576.32	570.89	5.43	106.186	0			
1,750.00	1,748.34	1,123.00	1,122.39	2.15	3.52	5.88	626.11	620.52	5.59	112.022	0			
1,800.00	1,797.95	1,123.00	1,122.39	2.32	3.52	5.45	675.84	670.10	5.75	117.548	0			
1,850.00	1,847.45	1,123.00	1,122.39	2.49	3.52	5.12	725.53	719.62	5.91	122.707	0			
1,900.00	1,896.82	1,123.00	1,122.39	2.66	3.52	4.86	775.17	769.10	6.07	127.613	0			
1,950.00	1,946.05	1,123.00	1,122.39	2.84	3.52	4.65	824.75	818.51	6.24	132.170	0			
2,000.00	1,995.12	1,123.00	1,122.39	3.01	3.52	4.46	874.26	867.86	6.40	136.536	0			
2,050.00	2,044.02	1,123.00	1,122.39	3.18	3.52	4.29	923.71	917.13	6.58	140.323	0			
2,100.00	2,092.73	1,123.00	1,122.39	3.36	3.52	4.14	973.10	966.35	6.75	144.257	0			
2,150.00	2,141.24	1,123.00	1,122.39	3.53	3.52	4.00	1,022.40	1,015.50	6.90	148.214	0			
2,200.00	2,189.53	1,123.00	1,122.39	3.71	3.52	3.88	1,071.63	1,064.57	7.06	151.786	0			
2,250.00	2,237.60	1,123.00	1,122.39	3.89	3.52	3.76	1,120.78	1,113.56	7.22	155.231	0			
2,300.00	2,285.41	1,123.00	1,122.39	4.07	3.52	3.65	1,169.85	1,162.46	7.38	158.470	0			
2,350.00	2,332.97	1,123.00	1,122.39	4.25	3.52	3.55	1,218.82	1,211.28	7.54	161.576	0			
2,400.00	2,380.25	1,123.00	1,122.39	4.43	3.52	3.46	1,267.70	1,260.00	7.70	164.553	0			
2,450.00	2,427.24	1,123.00	1,122.39	4.62	3.52	3.37	1,316.49	1,308.62	7.87	167.352	0			
2,500.00	2,473.96	1,123.00	1,122.39	4.81	3.52	3.32	1,365.20	1,357.15	8.04	169.752	0			
2,550.00	2,520.63	1,123.00	1,122.39	5.00	3.52	3.32	1,413.96	1,405.72	8.24	171.655	0			
2,600.00	2,567.30	1,123.00	1,122.39	5.19	3.52	3.32	1,462.81	1,454.38	8.43	173.452	0			

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0		
50.00	50.00	50.00	50.00	0.04	0.06	180.00	0.06	-0.04	0.10	0.582	0		Level 1
100.00	100.00	100.00	100.00	0.13	0.13	180.00	0.23	-0.02	0.25	0.913	0		Level 1
150.00	150.00	150.00	150.00	0.22	0.30	180.00	0.52	0.00	0.52	0.993	0		Level 1
200.00	200.00	200.00	200.00	0.36	0.48	-172.22	0.91	0.07	0.84	1.085	0		Level 2
250.00	250.00	250.00	250.00	0.54	0.66	178.64	1.36	0.16	1.20	1.137	0		Level 2
300.00	299.99	299.99	299.99	0.71	0.84	164.55	1.78	0.23	1.56	1.145	0		Level 2
350.00	349.99	349.99	349.99	0.89	1.02	142.06	2.13	0.22	1.91	1.116	0		Level 2
400.00	399.99	399.99	399.99	1.07	1.20	110.93	2.33	0.06	2.27	1.027	0		Level 2
450.00	449.99	449.99	449.99	1.24	1.38	105.13	2.44	-0.18	2.62	0.933	0		Level 1
500.00	499.99	499.99	499.99	1.42	1.56	109.39	2.60	-0.37	2.97	0.875	0		Level 1
550.00	549.98	549.98	549.98	1.59	1.74	117.39	2.86	-0.47	3.33	0.860	0		Level 1
600.00	599.98	599.98	599.98	1.77	1.92	126.25	3.27	-0.42	3.68	0.887	0		Level 1
650.00	649.97	649.97	649.97	1.94	2.10	136.82	3.92	-0.12	4.04	0.970	0		Level 1
700.00	699.95	699.95	699.95	2.12	2.28	146.54	4.92	0.52	4.39	1.119	0		Level 2
750.00	749.93	749.93	749.93	2.30	2.46	154.60	6.25	1.50	4.75	1.316	0		Level 3
800.00	799.90	799.90	799.90	2.47	2.63	159.67	7.89	2.79	5.10	1.546	0		
850.00	849.85	849.85	849.85	2.65	2.81	162.22	9.83	4.37	5.46	1.800	0		
900.00	899.80	899.80	899.80	2.83	2.99	165.15	12.07	6.25	5.82	2.075	0		
950.00	949.73	949.73	949.73	3.01	3.17	168.15	14.59	8.42	6.17	2.364	0		
1,000.00	999.65	999.65	999.65	3.19	3.35	170.90	17.40	10.87	6.53	2.665	0		
1,050.00	1,049.55	1,049.55	1,049.55	3.36	3.53	173.25	20.50	13.61	6.88	2.978	0		
1,100.00	1,099.44	1,099.44	1,099.44	3.54	3.71	174.40	23.75	16.51	7.24	3.280	0		
1,150.00	1,149.35	1,149.35	1,149.35	3.72	3.89	168.09	26.77	19.17	7.60	3.522	0		
1,200.00	1,199.28	1,199.28	1,199.28	3.90	4.07	152.85	29.28	21.32	7.96	3.679	0		
1,250.00	1,249.23	1,248.81	1,248.81	4.08	4.24	138.52	31.39	23.08	8.31	3.778	0		
1,300.00	1,299.20	1,298.26	1,298.24	4.25	4.41	115.52	33.54	24.88	8.66	3.874	0		
1,350.00	1,349.18	1,347.64	1,347.58	4.42	4.58	96.80	35.77	26.78	9.00	3.977	0		
1,400.00	1,399.17	1,396.97	1,396.82	4.59	4.75	42.77	38.02	28.68	9.33	4.074	0		
1,450.00	1,449.17	1,446.24	1,445.94	4.76	4.92	12.35	40.89	31.23	9.67	4.230	0		
1,500.00	1,499.14	1,495.43	1,494.91	4.92	5.09	15.13	43.90	33.90	10.00	4.391	0		
1,550.00	1,549.09	1,544.54	1,543.71	5.09	5.26	17.69	46.99	36.66	10.33	4.549	0		
1,600.00	1,599.00	1,593.57	1,592.34	5.26	5.43	11.12	50.20	39.55	10.66	4.710	0		
1,650.00	1,648.85	1,642.55	1,640.79	5.43	5.60	7.47	53.54	42.55	10.99	4.873	0		
1,700.00	1,698.64	1,691.46	1,689.05	5.60	5.77	5.37	56.97	45.65	11.31	5.036	0		
1,750.00	1,748.34	1,740.32	1,737.12	5.77	5.95	4.13	60.46	48.82	11.64	5.195	0		
1,800.00	1,797.95	1,789.11	1,784.97	5.94	6.12	3.37	63.99	52.03	11.96	5.351	0		
1,850.00	1,847.45	1,837.85	1,832.59	6.11	6.29	2.88	67.55	55.27	12.28	5.501	0		
1,900.00	1,896.82	1,886.53	1,879.98	6.29	6.47	2.56	71.14	58.54	12.60	5.646	0		
1,950.00	1,946.05	1,935.15	1,927.11	6.46	6.65	2.33	74.73	61.81	12.92	5.785	0		
2,000.00	1,995.12	1,983.72	1,973.98	6.63	6.82	2.15	78.32	65.08	13.23	5.918	0		
2,050.00	2,044.02	2,032.22	2,020.57	6.80	7.00	1.99	81.90	68.35	13.55	6.044	0		
2,100.00	2,092.73	2,080.68	2,066.88	6.98	7.18	1.83	85.47	71.61	13.86	6.167	0		
2,150.00	2,141.24	2,129.07	2,112.88	7.15	7.36	1.68	89.03	74.86	14.17	6.284	0		
2,200.00	2,189.53	2,178.40	2,159.56	7.33	7.55	1.52	92.40	77.92	14.48	6.379	0		
2,250.00	2,237.60	2,228.33	2,206.79	7.51	7.74	1.34	94.96	80.16	14.80	6.417	0		
2,300.00	2,285.41	2,278.30	2,254.06	7.69	7.93	1.16	96.66	81.54	15.11	6.396	0		
2,350.00	2,332.97	2,328.30	2,301.34	7.87	8.12	0.95	97.48	82.06	15.43	6.319	0		
2,400.00	2,380.25	2,378.29	2,348.64	8.05	8.31	0.74	97.44	81.71	15.74	6.192	0		
2,450.00	2,427.24	2,428.29	2,395.93	8.24	8.51	0.50	96.53	80.49	16.05	6.015	0		
2,500.00	2,473.96	2,478.26	2,443.20	8.42	8.70	0.36	94.84	78.45	16.39	5.787	0		
2,550.00	2,520.63	2,528.22	2,490.46	8.61	8.90	0.37	93.01	76.24	16.77	5.547	0		

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
2,600.00	2,567.30	2,578.19	2,537.72	8.80	9.09	0.37	91.18	74.03	17.15	5.317	0		
2,650.00	2,613.97	2,628.16	2,584.99	8.99	9.29	0.37	89.35	71.82	17.54	5.096	0		
2,700.00	2,660.64	2,678.12	2,632.25	9.18	9.49	0.37	87.52	69.60	17.92	4.884	0		
2,750.00	2,707.32	2,728.09	2,679.52	9.38	9.69	0.38	85.69	67.38	18.31	4.680	0		
2,800.00	2,753.99	2,778.06	2,726.78	9.57	9.89	0.38	83.86	65.16	18.70	4.484	0		
2,850.00	2,800.66	2,828.02	2,774.04	9.77	10.09	0.38	82.03	62.94	19.09	4.296	0		
2,900.00	2,847.33	2,877.99	2,821.31	9.97	10.29	0.39	80.21	60.72	19.49	4.116	0		
2,950.00	2,894.00	2,927.96	2,868.57	10.17	10.49	0.39	78.38	58.49	19.88	3.942	0		
3,000.00	2,940.67	2,977.92	2,915.84	10.37	10.70	0.39	76.55	56.26	20.28	3.774	0		
3,050.00	2,987.34	3,027.89	2,963.10	10.57	10.90	0.40	74.72	54.04	20.68	3.613	0		
3,100.00	3,034.01	3,077.86	3,010.36	10.77	11.10	0.40	72.89	51.81	21.08	3.458	0		
3,150.00	3,080.68	3,127.82	3,057.63	10.97	11.30	0.40	71.06	49.58	21.48	3.308	0		
3,200.00	3,127.35	3,177.79	3,104.89	11.17	11.51	0.41	69.23	47.34	21.88	3.163	0		
3,250.00	3,174.02	3,227.75	3,152.16	11.38	11.71	0.41	67.40	45.11	22.29	3.024	0		
3,300.00	3,220.69	3,277.72	3,199.42	11.58	11.92	0.42	65.57	42.88	22.69	2.889	0		
3,350.00	3,267.36	3,327.69	3,246.69	11.79	12.12	0.42	63.74	40.64	23.10	2.759	0		
3,400.00	3,314.03	3,377.65	3,293.95	11.99	12.33	0.43	61.91	38.41	23.51	2.634	0		
3,450.00	3,360.70	3,427.62	3,341.21	12.20	12.53	0.43	60.08	36.17	23.91	2.512	0		
3,500.00	3,407.37	3,477.59	3,388.48	12.41	12.74	0.44	58.25	33.93	24.32	2.395	0		
3,550.00	3,454.05	3,527.55	3,435.74	12.62	12.94	0.44	56.42	31.69	24.73	2.281	0		
3,600.00	3,500.72	3,577.52	3,483.01	12.82	13.15	0.45	54.59	29.45	25.14	2.171	0		
3,650.00	3,547.39	3,627.49	3,530.27	13.03	13.36	0.46	52.76	27.21	25.55	2.065	0		
3,700.00	3,594.06	3,677.45	3,577.53	13.24	13.56	0.46	50.93	24.97	25.96	1.962	0		
3,750.00	3,640.73	3,727.42	3,624.80	13.45	13.77	0.47	49.10	22.73	26.38	1.862	0		
3,800.00	3,687.40	3,777.39	3,672.06	13.66	13.98	0.48	47.27	20.49	26.79	1.765	0		
3,850.00	3,734.07	3,827.35	3,719.33	13.87	14.19	0.49	45.45	18.24	27.20	1.671	0		
3,900.00	3,780.74	3,877.32	3,766.59	14.08	14.39	0.50	43.62	16.00	27.62	1.579	0		
3,950.00	3,827.41	3,927.29	3,813.85	14.29	14.60	0.51	41.79	13.76	28.03	1.491	0		Level 3
4,000.00	3,874.08	3,977.25	3,861.12	14.51	14.81	0.52	39.96	11.51	28.44	1.405	0		Level 3
4,050.00	3,920.75	4,027.22	3,908.38	14.72	15.02	0.54	38.13	9.27	28.86	1.321	0		Level 3
4,100.00	3,967.42	4,077.19	3,955.65	14.93	15.23	0.55	36.30	7.02	29.28	1.240	0		Level 2
4,150.00	4,014.09	4,127.15	4,002.91	15.14	15.44	0.57	34.47	4.78	29.69	1.161	0		Level 2
4,200.00	4,060.76	4,177.12	4,050.18	15.36	15.65	0.59	32.64	2.53	30.11	1.084	0		Level 2
4,250.00	4,107.43	4,227.09	4,097.44	15.57	15.85	0.61	30.81	0.28	30.53	1.009	0		Level 2
4,300.00	4,154.10	4,277.05	4,144.70	15.78	16.06	0.63	28.98	-1.96	30.94	0.937	0		Level 1
4,350.00	4,200.78	4,327.02	4,191.97	16.00	16.27	0.66	27.15	-4.21	31.36	0.866	0		Level 1
4,400.00	4,247.45	4,376.98	4,239.23	16.21	16.48	0.69	25.32	-6.46	31.78	0.797	0		Level 1
4,450.00	4,294.12	4,426.95	4,286.50	16.42	16.69	0.72	23.49	-8.71	32.20	0.730	0		Level 1
4,500.00	4,340.79	4,476.92	4,333.76	16.64	16.90	0.76	21.66	-10.96	32.62	0.664	0		Level 1
4,550.00	4,387.46	4,526.88	4,381.02	16.85	17.11	0.81	19.83	-13.21	33.04	0.600	0		Level 1
4,600.00	4,434.13	4,576.85	4,428.29	17.07	17.32	0.86	18.00	-15.45	33.46	0.538	0		Level 1
4,650.00	4,480.80	4,626.82	4,475.55	17.28	17.53	0.93	16.17	-17.70	33.88	0.477	0		Level 1
4,700.00	4,527.47	4,676.78	4,522.82	17.50	17.74	1.02	14.35	-19.95	34.30	0.418	0		Level 1
4,750.00	4,574.14	4,726.75	4,570.08	17.71	17.95	1.13	12.52	-22.20	34.72	0.361	0		Level 1
4,800.00	4,620.81	4,776.72	4,617.34	17.93	18.16	1.28	10.69	-24.45	35.14	0.304	0		Level 1
4,850.00	4,667.48	4,826.68	4,664.61	18.15	18.37	1.50	8.86	-26.70	35.56	0.249	0		Level 1
4,900.00	4,714.15	4,876.65	4,711.87	18.36	18.58	1.82	7.03	-28.95	35.98	0.195	0		Level 1
4,950.00	4,760.82	4,926.62	4,759.14	18.58	18.80	2.38	5.20	-31.19	36.39	0.143	0		Level 1
5,000.00	4,807.49	4,976.58	4,806.40	18.79	19.01	3.53	3.37	-33.43	36.81	0.092	0		Level 1
5,050.00	4,854.16	5,026.55	4,853.67	19.01	19.22	7.42	1.55	-35.66	37.21	0.042	0		Level 1
5,092.03	4,893.40	5,068.55	4,893.40	19.19	19.39	90.24	0.19	-38.36	38.55	0.005	0		Level 1
5,100.00	4,900.83	5,076.52	4,900.93	19.23	19.43	146.69	0.35	-37.87	38.22	0.009	0		Level 1

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risked Separation Factor	Probability of Collision	Warning
5,150.00	4,947.50	5,126.48	4,948.19	19.45	19.64	175.04	2.13	-36.03	38.16	0.056	0		Level 1
5,200.00	4,994.18	5,176.45	4,995.46	19.66	19.85	177.44	3.96	-34.60	38.56	0.103	0		Level 1
5,250.00	5,040.85	5,226.42	5,042.72	19.88	20.06	178.33	5.78	-33.19	38.97	0.148	0		Level 1
5,300.00	5,087.52	5,276.38	5,089.99	20.10	20.27	178.79	7.61	-31.78	39.39	0.193	0		Level 1
5,350.00	5,134.19	5,326.35	5,137.25	20.31	20.48	179.07	9.44	-30.37	39.81	0.237	0		Level 1
5,400.00	5,180.86	5,376.32	5,184.51	20.53	20.70	179.26	11.27	-28.96	40.23	0.280	0		Level 1
5,450.00	5,227.53	5,426.28	5,231.78	20.75	20.91	179.40	13.10	-27.55	40.65	0.322	0		Level 1
5,500.00	5,274.20	5,476.25	5,279.04	20.97	21.12	179.51	14.93	-26.15	41.08	0.363	0		Level 1
5,550.00	5,320.87	5,526.21	5,326.31	21.19	21.33	179.59	16.76	-24.74	41.50	0.404	0		Level 1
5,600.00	5,367.54	5,576.18	5,373.57	21.40	21.54	179.65	18.59	-23.34	41.92	0.443	0		Level 1
5,650.00	5,414.21	5,626.15	5,420.83	21.62	21.75	179.70	20.42	-21.93	42.35	0.482	0		Level 1
5,700.00	5,460.88	5,676.11	5,468.10	21.84	21.97	179.75	22.25	-20.53	42.77	0.520	0		Level 1
5,750.00	5,507.55	5,726.08	5,515.36	22.06	22.18	179.79	24.08	-19.12	43.20	0.557	0		Level 1
5,800.00	5,554.22	5,776.05	5,562.63	22.28	22.39	179.82	25.90	-17.72	43.62	0.594	0		Level 1
5,850.00	5,600.89	5,826.01	5,609.89	22.49	22.60	179.85	27.73	-16.31	44.05	0.630	0		Level 1
5,900.00	5,647.56	5,875.98	5,657.15	22.71	22.81	179.87	29.56	-14.91	44.47	0.665	0		Level 1
5,950.00	5,694.23	5,925.95	5,704.42	22.93	23.03	179.89	31.39	-13.51	44.90	0.699	0		Level 1
6,000.00	5,740.91	5,975.91	5,751.68	23.15	23.24	179.91	33.22	-12.10	45.32	0.733	0		Level 1
6,050.00	5,787.58	6,025.88	5,798.95	23.37	23.45	179.93	35.05	-10.70	45.75	0.766	0		Level 1
6,100.00	5,834.25	6,075.85	5,846.21	23.59	23.66	179.95	36.88	-9.29	46.18	0.799	0		Level 1
6,150.00	5,880.92	6,125.81	5,893.48	23.81	23.87	179.96	38.71	-7.89	46.60	0.831	0		Level 1
6,200.00	5,927.59	6,175.78	5,940.74	24.03	24.09	179.97	40.54	-6.49	47.03	0.862	0		Level 1
6,250.00	5,974.26	6,225.75	5,988.00	24.25	24.30	179.99	42.37	-5.09	47.45	0.893	0		Level 1
6,300.00	6,021.08	6,275.73	6,035.28	24.46	24.51	180.00	43.78	-4.16	47.94	0.913	0		Level 1
6,350.00	6,068.20	6,325.72	6,082.57	24.68	24.72	-179.99	44.32	-4.10	48.42	0.915	0		Level 1
6,400.00	6,115.60	6,375.72	6,129.87	24.89	24.94	-179.98	43.98	-4.90	48.88	0.900	0		Level 1
6,450.00	6,163.27	6,425.70	6,177.15	25.10	25.15	-179.97	42.77	-6.55	49.32	0.867	0		Level 1
6,500.00	6,211.20	6,475.44	6,224.21	25.30	25.36	-179.96	40.73	-9.01	49.75	0.819	0		Level 1
6,550.00	6,259.37	6,524.71	6,271.03	25.51	25.57	-179.95	38.48	-11.67	50.15	0.767	0		Level 1
6,600.00	6,307.77	6,574.01	6,318.14	25.71	25.77	-179.93	36.22	-14.32	50.54	0.717	0		Level 1
6,650.00	6,356.38	6,623.36	6,365.54	25.90	25.97	-179.92	33.94	-16.97	50.91	0.667	0		Level 1
6,700.00	6,405.18	6,672.74	6,413.20	26.10	26.17	-179.90	31.66	-19.61	51.26	0.618	0		Level 1
6,750.00	6,454.17	6,722.16	6,461.12	26.28	26.37	-179.88	29.36	-22.24	51.60	0.569	0		Level 1
6,800.00	6,503.33	6,771.62	6,509.27	26.47	26.56	-179.86	27.05	-24.86	51.91	0.521	0		Level 1
6,850.00	6,552.63	6,821.12	6,557.65	26.65	26.75	-179.83	24.74	-27.47	52.21	0.474	0		Level 1
6,900.00	6,602.08	6,870.66	6,606.25	26.84	26.94	-179.80	22.42	-30.07	52.49	0.427	0		Level 1
6,950.00	6,651.64	6,920.24	6,655.04	27.01	27.13	-179.77	20.08	-32.66	52.74	0.381	0		Level 1
7,000.00	6,701.32	6,969.85	6,704.01	27.19	27.31	-179.72	17.74	-35.24	52.98	0.335	0		Level 1
7,050.00	6,751.08	7,019.51	6,753.16	27.36	27.49	-179.67	15.40	-37.80	53.20	0.289	0		Level 1
7,100.00	6,800.93	7,069.21	6,802.46	27.53	27.66	-179.59	13.05	-40.35	53.40	0.244	0		Level 1
7,150.00	6,850.83	7,118.95	6,851.90	27.69	27.84	-179.49	10.69	-42.89	53.58	0.200	0		Level 1
7,200.00	6,900.78	7,168.73	6,901.47	27.86	28.01	-179.33	8.33	-45.41	53.74	0.155	0		Level 1
7,250.00	6,950.76	7,218.55	6,951.15	28.01	28.18	-179.05	5.97	-47.90	53.87	0.111	0		Level 1
7,300.00	7,000.76	7,268.41	7,000.93	28.17	28.34	-178.40	3.60	-50.38	53.98	0.067	0		Level 1
7,350.00	7,050.76	7,318.32	7,050.81	28.32	28.50	-77.97	1.63	-52.63	54.26	0.030	0		Level 1
7,400.00	7,100.76	7,368.29	7,100.76	28.47	28.66	-70.59	0.54	-54.00	54.54	0.010	0		Level 1
7,450.00	7,150.76	7,418.29	7,150.76	28.62	28.82	-61.08	0.29	-54.64	54.94	0.005	0		Level 1
7,500.00	7,200.76	7,468.29	7,200.76	28.77	28.97	-61.08	0.29	-54.95	55.24	0.005	0		Level 1
7,550.00	7,250.76	7,518.29	7,250.76	28.93	29.12	-61.08	0.29	-55.25	55.55	0.005	0		Level 1
7,600.00	7,300.76	7,568.29	7,300.76	29.08	29.28	-61.08	0.29	-55.56	55.85	0.005	0		Level 1
7,650.00	7,350.76	7,618.29	7,350.76	29.23	29.43	-61.08	0.29	-55.87	56.16	0.005	0		Level 1
7,700.00	7,400.76	7,668.29	7,400.76	29.39	29.59	-61.08	0.29	-56.17	56.46	0.005	0		Level 1

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - PLAN 3												Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision	Warning
7,750.00	7,450.76	7,718.29	7,450.76	29.54	29.74	-61.08	0.29	-56.48	56.77	0.005	0		Level 1
7,800.00	7,500.76	7,768.29	7,500.76	29.69	29.90	-61.08	0.29	-56.79	57.08	0.005	0		Level 1
7,850.00	7,550.76	7,818.29	7,550.76	29.85	30.05	-61.08	0.29	-57.10	57.39	0.005	0		Level 1
7,900.00	7,600.76	7,868.29	7,600.76	30.00	30.21	-61.08	0.29	-57.41	57.70	0.005	0		Level 1
7,950.00	7,650.76	7,918.29	7,650.76	30.16	30.36	-61.08	0.29	-57.72	58.01	0.005	0		Level 1
8,000.00	7,700.76	7,968.29	7,700.76	30.31	30.52	-61.08	0.29	-58.03	58.32	0.005	0		Level 1
8,050.00	7,750.76	8,018.29	7,750.76	30.47	30.67	-61.08	0.29	-58.34	58.63	0.005	0		Level 1
8,100.00	7,800.76	8,068.29	7,800.76	30.62	30.83	-61.08	0.29	-58.65	58.94	0.005	0		Level 1
8,150.00	7,850.76	8,118.29	7,850.76	30.78	30.99	-61.08	0.29	-58.96	59.25	0.005	0		Level 1
8,200.00	7,900.76	8,168.29	7,900.76	30.93	31.14	-61.08	0.29	-59.27	59.56	0.005	0		Level 1
8,250.00	7,950.76	8,218.29	7,950.76	31.09	31.30	-61.08	0.29	-59.59	59.88	0.005	0		Level 1
8,300.00	8,000.76	8,268.29	8,000.76	31.25	31.46	-61.08	0.29	-59.90	60.19	0.005	0		Level 1
8,350.00	8,050.76	8,318.29	8,050.76	31.40	31.62	-61.08	0.29	-60.21	60.51	0.005	0		Level 1
8,400.00	8,100.76	8,368.29	8,100.76	31.56	31.77	-61.08	0.29	-60.53	60.82	0.005	0		Level 1
8,450.00	8,150.76	8,418.29	8,150.76	31.72	31.93	-61.08	0.29	-60.84	61.13	0.005	0		Level 1
8,500.00	8,200.76	8,468.29	8,200.76	31.88	32.09	-61.08	0.29	-61.16	61.45	0.005	0		Level 1
8,550.00	8,250.76	8,518.29	8,250.76	32.03	32.25	-61.08	0.29	-61.47	61.77	0.005	0		Level 1
8,600.00	8,300.76	8,568.29	8,300.76	32.19	32.41	-61.08	0.29	-61.79	62.08	0.005	0		Level 1
8,650.00	8,350.76	8,618.29	8,350.76	32.35	32.57	-61.08	0.29	-62.11	62.40	0.005	0		Level 1
8,700.00	8,400.76	8,668.29	8,400.76	32.51	32.73	-61.08	0.29	-62.42	62.72	0.005	0		Level 1
8,750.00	8,450.76	8,718.29	8,450.76	32.67	32.89	-61.08	0.29	-62.74	63.03	0.005	0		Level 1
8,800.00	8,500.76	8,768.29	8,500.76	32.83	33.05	-61.08	0.29	-63.06	63.35	0.005	0		Level 1
8,850.00	8,550.76	8,818.29	8,550.76	32.98	33.21	-61.08	0.29	-63.38	63.67	0.005	0		Level 1
8,900.00	8,600.76	8,868.29	8,600.76	33.14	33.37	-61.08	0.29	-63.70	63.99	0.005	0		Level 1
8,950.00	8,650.76	8,918.29	8,650.76	33.30	33.53	-61.08	0.29	-64.02	64.31	0.005	0		Level 1
9,000.00	8,700.76	8,968.29	8,700.76	33.46	33.69	-61.08	0.29	-64.34	64.63	0.005	0		Level 1
9,050.00	8,750.76	9,018.29	8,750.76	33.62	33.85	-61.08	0.29	-64.66	64.95	0.004	0		Level 1
9,100.00	8,800.76	9,068.29	8,800.76	33.78	34.01	-61.08	0.29	-64.98	65.27	0.004	0		Level 1
9,150.00	8,850.76	9,118.29	8,850.76	33.94	34.17	-61.08	0.29	-65.30	65.59	0.004	0		Level 1
9,200.00	8,900.76	9,168.29	8,900.76	34.10	34.33	-61.08	0.29	-65.62	65.91	0.004	0		Level 1
9,250.00	8,950.76	9,218.29	8,950.76	34.26	34.49	-61.08	0.29	-65.94	66.24	0.004	0		Level 1
9,300.00	9,000.76	9,268.29	9,000.76	34.43	34.65	-61.08	0.29	-66.27	66.56	0.004	0		Level 1
9,350.00	9,050.76	9,318.29	9,050.76	34.59	34.81	-61.08	0.29	-66.59	66.88	0.004	0		Level 1
9,400.00	9,100.76	9,368.29	9,100.76	34.75	34.98	-61.08	0.29	-66.91	67.20	0.004	0		Level 1
9,450.00	9,150.76	9,418.29	9,150.76	34.91	35.14	-61.08	0.29	-67.23	67.53	0.004	0		Level 1
9,500.00	9,200.76	9,468.29	9,200.76	35.07	35.30	-61.08	0.29	-67.56	67.85	0.004	0		Level 1
9,550.00	9,250.76	9,518.29	9,250.76	35.23	35.46	-61.08	0.29	-67.88	68.17	0.004	0		Level 1
9,600.00	9,300.76	9,568.29	9,300.76	35.39	35.63	-61.08	0.29	-68.21	68.50	0.004	0		Level 1
9,650.00	9,350.76	9,618.29	9,350.76	35.56	35.79	-61.08	0.29	-68.53	68.82	0.004	0		Level 1
9,700.00	9,400.76	9,668.29	9,400.76	35.72	35.95	-61.08	0.29	-68.86	69.15	0.004	0		Level 1
9,750.00	9,450.76	9,718.29	9,450.76	35.88	36.11	-61.08	0.29	-69.18	69.47	0.004	0		Level 1
9,800.00	9,500.76	9,768.29	9,500.76	36.04	36.28	-61.08	0.29	-69.51	69.80	0.004	0		Level 1
9,850.00	9,550.76	9,818.29	9,550.76	36.21	36.44	-61.08	0.29	-69.83	70.12	0.004	0		Level 1
9,900.00	9,600.76	9,868.29	9,600.76	36.37	36.60	-61.08	0.29	-70.16	70.45	0.004	0		Level 1
9,950.00	9,650.76	9,918.29	9,650.76	36.53	36.77	-61.08	0.29	-70.49	70.78	0.004	0		Level 1
10,000.00	9,700.76	9,968.29	9,700.76	36.70	36.93	-61.08	0.29	-70.81	71.10	0.004	0		Level 1
10,050.00	9,750.76	10,018.29	9,750.76	36.86	37.10	-61.08	0.29	-71.14	71.43	0.004	0		Level 1
10,100.00	9,800.76	10,068.29	9,800.76	37.02	37.26	-61.08	0.29	-71.47	71.76	0.004	0		Level 1
10,150.00	9,850.76	10,118.29	9,850.76	37.19	37.42	-61.08	0.29	-71.80	72.09	0.004	0		Level 1
10,200.00	9,900.76	10,168.29	9,900.76	37.35	37.59	-61.08	0.29	-72.12	72.42	0.004	0		Level 1
10,250.00	9,950.76	10,218.29	9,950.76	37.51	37.75	-61.08	0.29	-72.45	72.74	0.004	0		Level 1
10,300.00	10,000.76	10,268.29	10,000.76	37.68	37.92	-61.08	0.29	-72.78	73.07	0.004	0		Level 1

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.00 usft
OUTRIDER 27 FED - O27F 605H - O27F 605H ST1 - PLAN 3													Offset Well Error:	0.00 usft
Survey Program: 0-XOMR2_OWSG MWD+IFR1+MS														
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Risk Separation Factor	Probability of Collision		
10,350.00	10,050.76	10,318.29	10,050.76	37.84	38.08	-61.08	0.29	-73.11	73.40	0.004	0		Level 1	
10,400.00	10,100.76	10,368.29	10,100.76	38.01	38.25	-61.08	0.29	-73.44	73.73	0.004	0		Level 1	
10,450.00	10,150.76	10,418.29	10,150.76	38.17	38.41	-61.08	0.29	-73.77	74.06	0.004	0		Level 1	
10,500.00	10,200.76	10,468.29	10,200.76	38.34	38.58	-61.08	0.29	-74.10	74.39	0.004	0		Level 1	
10,550.00	10,250.76	10,518.29	10,250.76	38.50	38.74	-61.08	0.29	-74.43	74.72	0.004	0		Level 1	
10,600.00	10,300.76	10,568.29	10,300.76	38.66	38.91	-61.08	0.29	-74.76	75.05	0.004	0		Level 1	
10,650.00	10,350.76	10,618.29	10,350.76	38.83	39.07	-61.08	0.29	-75.09	75.38	0.004	0		Level 1	
10,700.00	10,400.76	10,668.29	10,400.76	38.99	39.24	-61.08	0.29	-75.42	75.71	0.004	0		Level 1	
10,750.00	10,450.76	10,718.29	10,450.76	39.16	39.41	-61.08	0.29	-75.75	76.04	0.004	0		Level 1	
10,800.00	10,500.76	10,768.29	10,500.76	39.33	39.57	-61.08	0.29	-76.08	76.37	0.004	0		Level 1	
10,850.00	10,550.76	10,818.29	10,550.76	39.49	39.74	-61.08	0.29	-76.41	76.71	0.004	0		Level 1	
10,900.00	10,600.76	10,868.29	10,600.76	39.66	39.90	-61.08	0.29	-76.75	77.04	0.004	0		Level 1	
10,950.00	10,650.76	10,918.29	10,650.76	39.82	40.07	-61.08	0.29	-77.08	77.37	0.004	0		Level 1	
11,000.00	10,700.76	10,968.29	10,700.76	39.99	40.24	-61.08	0.29	-77.41	77.70	0.004	0		Level 1	
11,050.00	10,750.76	11,018.29	10,750.76	40.15	40.40	-61.08	0.29	-77.74	78.03	0.004	0		Level 1	
11,100.00	10,800.76	11,068.29	10,800.76	40.32	40.57	-61.08	0.29	-78.07	78.37	0.004	0		Level 1	
11,150.00	10,850.76	11,118.29	10,850.76	40.49	40.74	-61.08	0.29	-78.41	78.70	0.004	0		Level 1	
11,200.00	10,900.76	11,168.29	10,900.76	40.65	40.90	-61.08	0.29	-78.74	79.03	0.004	0		Level 1	
11,250.00	10,950.76	11,218.29	10,950.76	40.82	41.07	-61.08	0.29	-79.07	79.37	0.004	0		Level 1	
11,300.00	11,000.76	11,268.29	11,000.76	40.99	41.24	-61.08	0.29	-79.41	79.70	0.004	0		Level 1	
11,350.00	11,050.76	11,318.29	11,050.76	41.15	41.40	-61.08	0.29	-79.74	80.03	0.004	0		Level 1	
11,400.00	11,100.76	11,368.29	11,100.76	41.32	41.57	-61.08	0.29	-80.08	80.37	0.004	0		Level 1	
11,450.00	11,150.76	11,418.29	11,150.76	41.49	41.74	-61.08	0.29	-80.41	80.70	0.004	0		Level 1	
11,500.00	11,200.76	11,468.29	11,200.76	41.65	41.91	-61.08	0.29	-80.74	81.04	0.004	0		Level 1	
11,550.00	11,250.76	11,518.29	11,250.76	41.82	42.07	-61.08	0.29	-81.08	81.37	0.004	0		Level 1	
11,600.00	11,300.76	11,568.29	11,300.76	41.99	42.24	-61.08	0.29	-81.41	81.71	0.004	0		Level 1	
11,650.00	11,350.76	11,618.29	11,350.76	42.15	42.41	-61.08	0.29	-81.75	82.04	0.004	0		Level 1	
11,700.00	11,400.76	11,668.29	11,400.76	42.32	42.58	-61.08	0.29	-82.08	82.38	0.004	0		Level 1	
11,750.00	11,450.76	11,718.29	11,450.76	42.49	42.74	-61.08	0.29	-82.42	82.71	0.004	0		Level 1	
11,800.00	11,500.76	11,768.29	11,500.76	42.66	42.91	-61.08	0.29	-82.76	83.05	0.004	0		Level 1	
11,850.00	11,550.76	11,818.29	11,550.76	42.82	43.08	-61.08	0.29	-83.09	83.38	0.004	0		Level 1	
11,900.00	11,600.76	11,868.29	11,600.76	42.99	43.25	-61.08	0.29	-83.43	83.72	0.003	0		Level 1	
11,950.00	11,650.76	11,918.29	11,650.76	43.16	43.42	-61.08	0.29	-83.76	84.06	0.003	0		Level 1	
12,000.00	11,700.76	11,968.29	11,700.76	43.33	43.59	-61.08	0.29	-84.10	84.39	0.003	0		Level 1 , ES, SF	

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



GeoGuidance Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Reference Depths are relative to O27F 605H @ 3558.00usft (H&P 508

Offset Depths are relative to Offset Datum

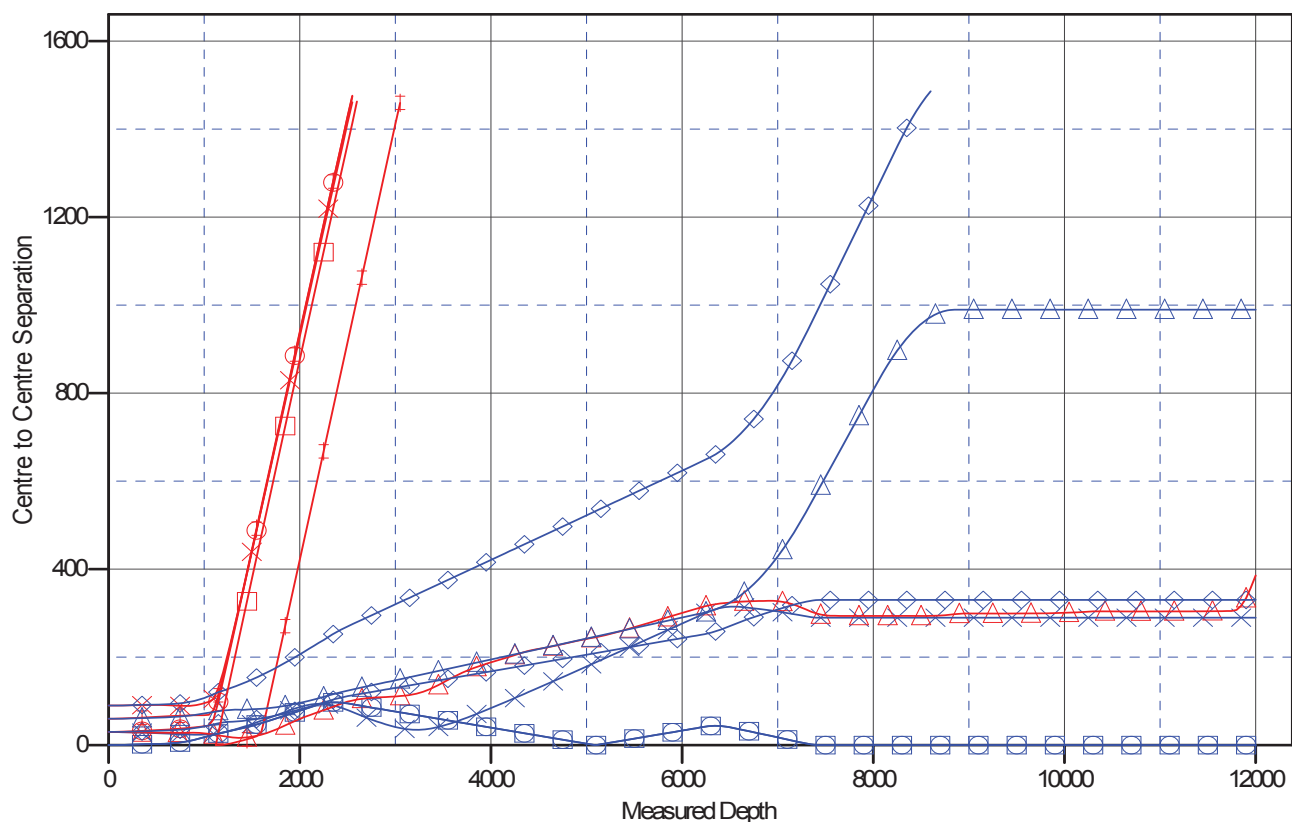
Central Meridian is -104.333334 °

Coordinates are relative to: O27F 605H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.35°

Ladder Plot



LEGEND

← O27F 509H, O27F 509H, PLAN4 V0	⊕ O27F 510H, O27F 510H, O27F 510HV0	✕ O27F 512H, O27F 512H, O27F 512HV0
⬆ O27F 509H, O27F 509H, O27F 509HV0	◆ O27F 510H, O27F 510H, PLAN3 V0	◆ O27F 512H, O27F 512H, PLAN6 V0
⬆ O27F 605H, O27F 605H OH, O27F 605H OH V0	⬆ O27F 511H, O27F 511H, O27F 511HV0	⬆ O27F 605H, O27F 605H ST1, O27F 605H ST1 V
⬆ O27F 605H, O27F 605H OH, PLAN3 V0	⬆ O27F 511H, O27F 511H, PLAN5 V0	⬆ O27F 605H, O27F 605H ST1, PLAN3 V0

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



GeoGuidance

Anticollision Risk Report



Company:	XTO ENERGY INC.	Local Co-ordinate Reference:	Well O27F 605H
Project:	LEA COUNTY, NM	TVD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Reference Site:	OUTRIDER 27 FED	MD Reference:	O27F 605H @ 3558.00usft (H&P 508 - 30' KB)
Site Error:	0.00	North Reference:	Grid
Reference Well:	O27F 605H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00	Output errors are at	2.00 sigma
Reference Wellbore	O27F 605H ST1	Database:	XTO ENERGY
Reference Design:	BOP1123	Offset TVD Reference:	Offset Datum

Reference Depths are relative to O27F 605H @ 3558.00usft (H&P 508

Offset Depths are relative to Offset Datum

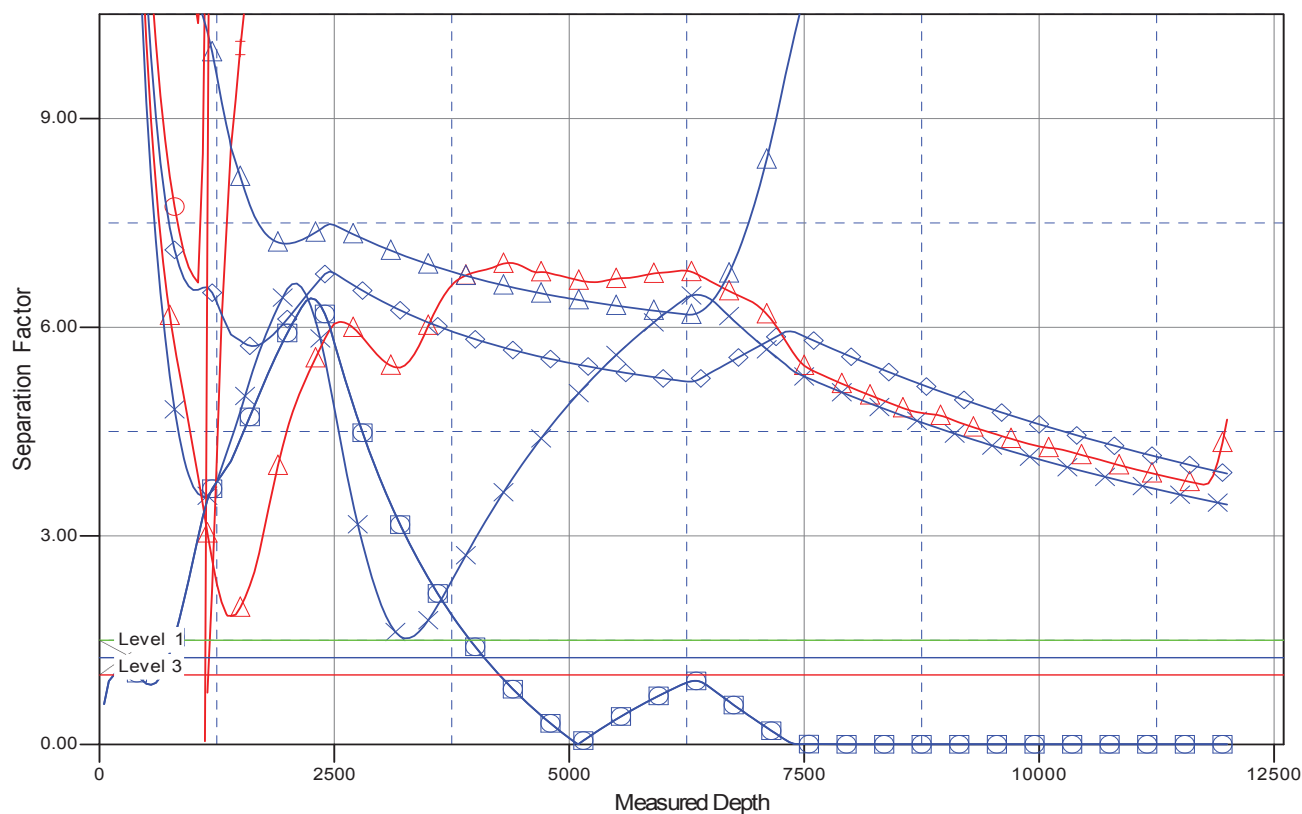
Central Meridian is -104.333334 °

Coordinates are relative to: O27F 605H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.35°

Separation Factor Plot



LEGEND

← O27F 509H, O27F 509H, PLAN4 V0	⊕ O27F 510H, O27F 510H, O27F 510HV0	✕ O27F 512H, O27F 512H, O27F 512HV0
⊕ O27F 509H, O27F 509H, O27F 509HV0	⊕ O27F 510H, O27F 510H, PLAN3 V0	⊕ O27F 512H, O27F 512H, PLAN6 V0
⊕ O27F 605H, O27F 605H OH, O27F 605H OHV0	⊕ O27F 511H, O27F 511H, O27F 511HV0	⊕ O27F 605H, O27F 605H ST1, O27F 605H ST1 V
⊕ O27F 605H, O27F 605H OH, PLAN3 V0	⊕ O27F 511H, O27F 511H, PLAN5 V0	⊕ O27F 605H, O27F 605H ST1, PLAN3 V0

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

RE: [EXTERNAL] Outrider 27 Federal 605H (API: 30-025-50287) -- Intermediate Collision w/Outrider 27 Federal 509H (API: 30-025-50237)

Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>

Tue 10/11/2022 6:07 AM

To: Vo, Long T <lvo@blm.gov>; Bailey, Stephen A <sbailey@blm.gov>

Cc: Dooling, Jessica <jessica.dooling@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>

Thank you, Long!

Sundry submissions for all work performed pending this morning. Will let you and the team know once submitted.

Appreciate your help with this issue.

Stephanie Rabadue

ExxonMobil UOG Unconventional

Permian Business Unit, Regulatory Manager

Phone: 432-620-6714

stephanie.rabadue@exxonmobil.com

*** Please Note My New Email Address: stephanie.rabadue@exxonmobil.com

From: Vo, Long T [mailto:lvo@blm.gov]

Sent: Tuesday, October 11, 2022 6:01 AM

To: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>; Bailey, Stephen A <sbailey@blm.gov>

Cc: Dooling, Jessica <jessica.dooling@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>

Subject: Re: [EXTERNAL] Outrider 27 Federal 605H (API: 30-025-50287) -- Intermediate Collision w/Outrider 27 Federal 509H (API: 30-025-50237)

External Email - Think Before You Click

Ms. Stephanie,

Before sidetracking the 605H, please properly secure and TA the 509H well. Please provide the BLM with a current and propose procedure of the TA. The collided interval of the 509H will need to have a balance plug 50' below and 50' on top and a CIBP with 25 sxs on top, the wells will also need to not pressure communicate with one another. Please perform an MIT test on the 509H.

To sidetrack the 605H please spot cement from the last Tag depth to the KOP and wait on cement until 500 psi is reached before drilling the sidetrack.

Regards,

Long Vo

Petroleum Engineer

Carlsbad Field Office

Land and Minerals

Bureau of Land Management

Department of Interior

575-988-5402 Cell

From: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>
Sent: Monday, October 10, 2022 5:16 PM
To: Vo, Long T <lvo@blm.gov>; Bailey, Stephen A <sbailey@blm.gov>
Cc: Dooling, Jessica <jessica.dooling@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>
Subject: RE: [EXTERNAL] Outrider 27 Federal 605H (API: 30-025-50287) -- Intermediate Collision w/Outrider 27 Federal 509H (API: 30-025-50237)

Long,

Thank you for the conversation this afternoon. While skidding the rig is an option if we continue to have difficulties, we'd need to skid to the otherside of the pad to be successful. This well is between two other wells on the pad at current: one to the North and the 509H to the South. I've attached our updated AC report for the 605H sidetrack/deviation in the intermediate casing. As discussed, our anticipated KOP would be at ~1123' MD where we tagged the last plug in the hole. XTO has no intention of drilling a surface casing window or interfering with the surface casing shoe associated with the 605H.

Please let us know if sidetracking/parallel and deviating the 605H is approvable.

Thank you for your help!

Stephanie Rabadue
ExxonMobil UOG Unconventional
Permian Business Unit, Regulatory Manager
Phone: 432-620-6714
stephanie.rabadue@exxonmobil.com

*** Please Note My New Email Address: stephanie.rabadue@exxonmobil.com

From: Vo, Long T [<mailto:lvo@blm.gov>]
Sent: Monday, October 10, 2022 4:35 PM
To: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>; Bailey, Stephen A <sbailey@blm.gov>
Cc: Dooling, Jessica <jessica.dooling@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>
Subject: Re: [EXTERNAL] Outrider 27 Federal 605H (API: 30-025-50287) -- Intermediate Collision w/Outrider 27 Federal 509H (API: 30-025-50237)

External Email - Think Before You Click

Stephanie,

With 605H only has the surface casing set, how about plugging this well and skid over 30' and drill a new well? Please see the attached skidding procedure. You'll just have to submit a skidding sundry and a P&A sundry. The 509H can be re-evaluated.

Regards,

Long Vo

Petroleum Engineer
Carlsbad Field Office
Land and Minerals
Bureau of Land Management
Department of Interior
575-988-5402 Cell

From: Rabadue, Stephanie <stephanie.rabadue@exxonmobil.com>
Sent: Monday, October 10, 2022 4:17 PM
To: Vo, Long T <lvo@blm.gov>; Bailey, Stephen A <sbailey@blm.gov>
Cc: Dooling, Jessica <jessica.dooling@exxonmobil.com>; Walls, Christopher <cwalls@blm.gov>
Subject: [EXTERNAL] Outrider 27 Federal 605H (API: 30-025-50287) -- Intermediate Collision w/Outrider 27 Federal 509H (API: 30-025-50237)

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Good afternoon, Long and Stephen,

As discussed on the phone, XTO experienced a wellbore collision the morning of Saturday, October 08.

Situation Summary

While drilling our Outrider 27 Federal 605H (API: 30-025-50287) we experienced severe bit drift that caused a collision with XTO's Outrider 27 Federal 509H (API: 30-025-50237) at approximately ~1553' MD/1580'TVD in the intermediate portions of the wells. Both wells are currently under control. Neither well had finished drilling to planned TD and neither well was completed/producing at the time of the incident. Both wells remain static. Post-collision, XTO pressure tested the 605H with the 509H well shut-in where it was observed the wellbores were communicating with each other. XTO then pumped a 500' 17.5ppg Class H cement plug at the base of the 605H (1580'MD), WOC, and tagged TOC at 1557'MD in the 605H bore, indicating that the majority of the cement fell into the 509H wellbore. A second 800' 14.8ppg Class C cement plug was then pumped at 1557MD'. After WOC, we were able to tag the plug at ~1123'MD. We're currently WOC for the next-12 hours to ensure cement integrity in the 605H hole.

Well Configuration / Current Status

Outrider 27 Federal 509H

1. Surface and Intermediate Casing Set.
2. Hole in Casing Point: TBD, Depth Under Evaluation.
3. Well is static.
4. No pressure observed on bradenhead for surface or intermediate annuli.

Configuration

Surface Csg: 17-1/2" hole, 13-3/8" 54.5ppf J-55 csg @ 968'MD
Surface Cmt: 124bbl of 12.8ppg 35/65 Poz C Lead; 229bbl of 14.8ppg Class C Tail. Circ'd to Surf.
Inter. Csg: 12-1/4" hole, 9-5/8" 40ppf P110/L80 csg (xo @4885') @ 11,660'MD
Inter. Cmt: 597bbl of 14ppg Class C Squeeze and 351bbl of 15.6ppg Class H Tail. Circ'd to Surf.

Outrider 27 Federal 605H

1. Surface casing set and cemented.
2. XTO was drilling ahead with intermediate hole when collision occurred at ~1553' MD/1580'TVD (Current TD of Intermediate Hole).
3. Well is static w/OH from 1112-1123' MD (Salt Formation).
4. No pressure observed on surface csg annuli.

Configuration

Surface Csg: 17-1/2" hole, 13-3/8" 54.5ppf J-55 csg @ 1112'MD
Surface Cmt: 124bbl of 12.8ppg 35/65 Poz C Lead; 229bbl of 14.8ppg Class C Tail. Circ'd to Surf.

Intermediate Hole: 12-1/4" @ 1553'MD/1580'TVD (Collision w/509H)

Proposed Plan

Outrider 27 Federal 509H

No current proposed plan. This well is under evaluation for forward plan. Wellbore integrity is of the utmost priority. Once the rig returns to the 509H, continued evaluation of the static wellbore will ensue and XTO will communicate and request BLM permission to proceed with our recommended plan of action (casing patch, abandonment, etcetera).

Outrider 27 Federal 605H

XTO requests permission to utilize the recently tagged plug at 1123'MD as a kick-off plug, then deviate and parallel the existing well with no changes anticipated to MD/TVD. Further, no change in casing/cement configuration are requested at this time. We'll be ready to proceed with this plan at ~3am, Tuesday October 11.

I appreciate your help this afternoon, especially it being a holiday!

Stephanie Rabadue

ExxonMobil UOG Unconventional
Permian Business Unit, Regulatory Manager
6401 Holiday Hill Road, Bldg 5
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 167236

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 167236
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	12/29/2022