

WPX Energy

Eddy County, New Mexico (NAD 83)

Boxer 32-22-27 Fee Pad

Boxer 32-22-27 Fee 401H

API: ???

Wellbore #1

Plan #3

30-015-45446

NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 16 2018

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Anticollision Report

14 November, 2018



Scientific Drilling

www.scientificdrilling.com

Scientific Drilling, Intl

Anticollision Report

Company: WPX Energy
 Project: Eddy County, New Mexico (NAD 83)
 Reference Site: Boxer 32-22-27 Fee Pad
 Site Error: 0.00 usft
 Reference Well: Boxer 32-22-27 Fee 401H
 Well Error: 0.00 usft
 Reference Wellbore: Wellbore #1
 Reference Design: Plan #3

Local Co-ordinate Reference: Well Boxer 32-22-27 Fee 401H
 TVD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
 MD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: Midland District
 Offset TVD Reference: Offset Datum

Reference	Plan #3
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 9,999.98 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program	Date	11/14/2018
From (usft)	To (usft)	Survey (Wellbore)
0.00	13,489.49	Plan #3 (Wellbore #1)
		Tool Name
		MWD+HRGM
		Description
		OWSG MWD + HRGM

Summary						
Site Name	Reference	Offset	Distance		Separation	Warning
	Measured	Measured	Between	Between		
Offset Well - Wellbore - Design	Depth	Depth	Centres	Ellipses	Factor	
	(usft)	(usft)	(usft)	(usft)		
Boxer 32-22-27 Fee Pad						
Cascade Fee #1 - Wellbore #1 - As Drilled	10,130.20	8,959.72	736.46	662.28	9.929	CC, ES
Cascade Fee #1 - Wellbore #1 - As Drilled	10,200.00	8,958.64	739.76	664.80	9.869	SF

Offset Design		Boxer 32-22-27 Fee Pad - Cascade Fee #1 - Wellbore #1 - As Drilled										Offset Site Error: 0.00 usft	
Survey Program: 211-MWD												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-99.58	-196.97	-1,167.40	1,183.90				
100.00	100.00	99.80	99.80	0.13	0.17	-99.56	-196.64	-1,167.40	1,183.85	1,183.55	0.30	3,987.639	
200.00	200.00	201.11	201.10	0.49	0.33	-99.51	-195.63	-1,167.40	1,183.68	1,182.88	0.82	1,440.052	
300.00	300.00	300.48	300.46	0.85	0.67	-99.48	-194.42	-1,167.40	1,183.48	1,181.96	1.52	779.896	
400.00	400.00	408.58	408.56	1.21	1.05	-99.42	-193.53	-1,167.11	1,183.09	1,180.83	2.26	523.238	
500.00	500.00	517.42	517.39	1.57	1.44	-99.40	-193.09	-1,165.79	1,181.83	1,178.82	3.00	393.618	
600.00	600.00	628.21	628.16	1.92	1.82	-99.44	-193.51	-1,163.55	1,179.90	1,176.15	3.75	314.677	
700.00	700.00	706.00	705.89	2.28	2.10	-99.44	-193.05	-1,160.73	1,176.70	1,172.32	4.38	268.599	
800.00	800.00	801.13	800.98	2.64	2.43	-99.38	-191.39	-1,158.59	1,174.29	1,169.22	5.07	231.576	
806.84	806.84	805.49	805.34	2.67	2.45	-99.38	-191.31	-1,158.60	1,174.28	1,169.17	5.11	229.775	
900.00	900.00	888.00	887.80	3.00	2.74	-99.28	-189.65	-1,160.54	1,175.98	1,170.25	5.73	205.172	
1,000.00	1,000.00	969.57	969.32	3.36	3.01	-99.24	-189.15	-1,163.30	1,178.93	1,172.57	6.37	185.140	
1,100.00	1,100.00	1,077.00	1,076.69	3.72	3.38	-99.38	-192.25	-1,164.39	1,180.36	1,173.26	7.09	166.423	
1,200.00	1,200.00	1,175.07	1,174.71	4.08	3.72	-99.48	-194.62	-1,165.24	1,181.62	1,173.83	7.79	151.689	
1,300.00	1,300.00	1,263.00	1,262.57	4.43	4.02	-99.37	-192.64	-1,167.97	1,184.30	1,175.85	8.45	140.140	
1,400.00	1,400.00	1,374.97	1,374.43	4.79	4.41	-99.18	-189.37	-1,171.58	1,187.03	1,177.83	9.20	129.027	
1,500.00	1,500.00	1,491.99	1,491.44	5.15	4.82	-99.17	-189.36	-1,173.13	1,188.34	1,178.37	9.97	119.232	
1,600.00	1,600.00	1,608.74	1,608.18	5.51	5.23	-99.17	-189.42	-1,172.99	1,188.23	1,177.50	10.73	110.728	
1,700.00	1,700.00	1,711.44	1,710.88	5.87	5.59	-99.15	-188.80	-1,171.98	1,187.15	1,175.70	11.45	103.689	
1,800.00	1,800.00	1,805.85	1,805.27	6.23	5.92	-99.13	-188.20	-1,171.29	1,186.33	1,174.20	12.14	97.734	
1,900.00	1,900.00	1,899.95	1,899.38	6.59	6.25	-99.12	-187.96	-1,171.02	1,186.01	1,173.19	12.83	92.467	
1,914.93	1,914.93	1,914.00	1,913.43	6.64	6.29	-99.12	-187.95	-1,171.02	1,186.01	1,173.08	12.93	91.732	
2,000.00	2,000.00	1,993.13	1,992.55	6.94	6.57	-99.12	-188.03	-1,171.21	1,186.22	1,172.71	13.51	87.809	
2,100.00	2,100.00	2,086.13	2,085.56	7.30	6.89	-99.13	-188.31	-1,171.91	1,187.01	1,172.82	14.19	83.649	
2,160.00	2,160.00	2,148.47	2,147.89	7.52	7.11	-99.14	-188.57	-1,172.54	1,187.66	1,173.03	14.62	81.221	

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

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Survey Program: 211-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)					
2,200.00	2,200.00	2,191.76	2,191.18	7.66	7.26	-117.68	-188.69	-1,172.85	1,188.09	1,173.17	14.92	79.650	
2,300.00	2,299.94	2,298.62	2,298.04	8.02	7.63	-117.79	-188.81	-1,173.14	1,189.83	1,174.18	15.64	76.052	
2,400.00	2,399.72	2,394.71	2,394.13	8.38	7.96	-118.02	-189.15	-1,173.26	1,193.12	1,176.79	16.34	73.039	
2,430.83	2,430.43	2,424.26	2,423.68	8.49	8.07	-118.11	-189.37	-1,173.34	1,194.54	1,177.99	16.55	72.186	
2,500.00	2,499.29	2,490.74	2,490.16	8.73	8.30	-118.41	-190.05	-1,173.59	1,198.02	1,180.99	17.03	70.364	
2,600.00	2,598.84	2,588.31	2,587.72	9.09	8.64	-118.84	-191.10	-1,174.12	1,203.28	1,185.55	17.72	67.889	
2,700.00	2,698.39	2,685.95	2,685.35	9.45	8.98	-119.26	-192.06	-1,174.81	1,208.76	1,190.34	18.42	65.606	
2,800.00	2,797.95	2,783.82	2,783.22	9.81	9.33	-119.67	-192.85	-1,175.68	1,214.44	1,195.32	19.13	63.491	
2,900.00	2,897.50	2,880.02	2,879.41	10.17	9.68	-120.06	-193.42	-1,176.71	1,220.34	1,200.51	19.83	61.552	
3,000.00	2,897.06	2,872.07	2,871.44	10.54	9.99	-120.43	-194.03	-1,178.15	1,226.78	1,206.27	20.51	59.815	
3,100.00	3,096.61	3,065.88	3,065.23	10.90	10.32	-120.80	-194.79	-1,180.15	1,233.85	1,212.65	21.20	58.200	
3,200.00	3,196.16	3,165.18	3,164.50	11.27	10.67	-121.18	-195.60	-1,182.43	1,241.16	1,219.24	21.91	56.639	
3,300.00	3,295.72	3,264.81	3,263.90	11.63	11.03	-121.56	-196.36	-1,184.74	1,248.52	1,225.90	22.63	55.176	
3,400.00	3,395.27	3,364.26	3,363.52	12.00	11.38	-121.95	-197.22	-1,187.01	1,255.93	1,232.59	23.34	53.800	
3,500.00	3,494.82	3,467.53	3,466.76	12.37	11.75	-122.34	-198.23	-1,189.24	1,263.31	1,239.23	24.08	52.471	
3,600.00	3,594.38	3,575.54	3,574.75	12.73	12.13	-122.75	-199.01	-1,191.01	1,270.17	1,245.34	24.83	51.160	
3,700.00	3,693.93	3,672.64	3,671.84	13.10	12.48	-123.10	-199.46	-1,192.28	1,276.70	1,251.17	25.54	49.996	
3,800.00	3,793.48	3,764.57	3,763.76	13.47	12.81	-123.42	-199.81	-1,194.00	1,283.80	1,257.58	26.22	48.956	
3,900.00	3,893.04	3,861.17	3,860.33	13.84	13.15	-123.75	-200.14	-1,196.29	1,291.42	1,264.49	26.93	47.954	
4,000.00	3,892.59	3,860.73	3,859.85	14.21	13.50	-124.07	-200.40	-1,198.71	1,299.12	1,271.47	27.65	46.985	
4,100.00	4,092.14	4,066.78	4,065.88	14.58	13.88	-124.42	-200.63	-1,201.09	1,306.66	1,278.27	28.40	46.016	
4,200.00	4,191.70	4,175.23	4,174.32	14.95	14.27	-124.78	-200.80	-1,202.79	1,313.59	1,284.44	29.15	45.060	
4,300.00	4,291.25	4,267.79	4,266.86	15.32	14.60	-125.07	-200.87	-1,204.18	1,320.48	1,290.64	29.84	44.246	
4,400.00	4,390.80	4,365.00	4,364.05	15.70	14.95	-125.37	-200.81	-1,206.25	1,327.95	1,297.40	30.55	43.461	
4,500.00	4,490.36	4,459.75	4,458.78	16.07	15.28	-125.65	-200.63	-1,208.56	1,335.71	1,304.46	31.26	42.736	
4,600.00	4,589.91	4,559.65	4,558.65	16.44	15.64	-125.93	-200.35	-1,210.98	1,343.48	1,311.51	31.98	42.014	
4,700.00	4,689.46	4,658.34	4,657.31	16.81	15.99	-126.22	-200.12	-1,213.38	1,351.30	1,318.61	32.69	41.331	
4,800.00	4,789.02	4,758.66	4,757.60	17.18	16.35	-126.50	-200.05	-1,215.81	1,359.20	1,325.78	33.42	40.671	
4,900.00	4,888.57	4,868.32	4,867.24	17.56	16.74	-126.82	-199.90	-1,217.97	1,366.68	1,332.50	34.18	39.981	
5,000.00	4,988.12	4,970.04	4,968.95	17.93	17.11	-127.11	-199.63	-1,219.35	1,373.58	1,338.67	34.91	39.342	
5,100.00	5,087.68	5,061.02	5,059.92	18.30	17.43	-127.37	-199.47	-1,220.94	1,380.90	1,345.30	35.60	38.791	
5,200.00	5,187.23	5,154.58	5,153.44	18.68	17.77	-127.63	-199.45	-1,223.11	1,388.84	1,352.55	36.29	38.266	
5,300.00	5,286.78	5,252.95	5,251.78	19.05	18.12	-127.91	-199.74	-1,225.47	1,397.00	1,359.99	37.01	37.745	
5,400.00	5,386.34	5,348.07	5,346.88	19.42	18.46	-128.20	-200.40	-1,227.75	1,405.33	1,367.61	37.71	37.263	
5,500.00	5,485.89	5,439.35	5,438.12	19.80	18.79	-128.48	-201.49	-1,230.25	1,414.18	1,375.79	38.40	36.830	
5,600.00	5,585.45	5,537.47	5,536.18	20.17	19.14	-128.79	-203.11	-1,233.27	1,423.56	1,384.44	39.11	36.397	
5,700.00	5,685.00	5,646.63	5,645.29	20.55	19.53	-129.13	-204.63	-1,236.21	1,432.52	1,392.64	39.88	35.922	
5,800.00	5,784.55	5,735.25	5,733.87	20.92	19.85	-129.40	-205.74	-1,238.42	1,441.31	1,400.76	40.55	35.545	
5,900.00	5,884.11	5,813.34	5,811.89	21.29	20.13	-129.65	-207.46	-1,241.22	1,451.48	1,410.31	41.16	35.261	
6,000.00	5,983.66	5,928.47	5,926.86	21.67	20.54	-130.03	-210.87	-1,246.23	1,462.80	1,420.84	41.96	34.864	
6,100.00	6,083.21	6,101.54	6,099.90	22.04	21.13	-130.53	-211.55	-1,247.24	1,469.18	1,426.21	42.97	34.191	
6,200.00	6,182.77	6,202.49	6,200.84	22.42	21.48	-130.77	-210.04	-1,246.46	1,474.07	1,430.39	43.68	33.747	
6,300.00	6,282.32	6,298.70	6,297.02	22.79	21.80	-130.97	-207.91	-1,246.00	1,478.97	1,434.60	44.38	33.328	
6,400.00	6,381.87	6,390.88	6,389.19	23.17	22.12	-131.16	-206.26	-1,245.84	1,484.34	1,439.28	45.08	32.941	
6,500.00	6,481.43	6,484.33	6,482.63	23.54	22.44	-131.38	-205.08	-1,245.97	1,490.22	1,444.47	45.75	32.573	
6,600.00	6,580.98	6,579.09	6,577.38	23.92	22.77	-131.59	-204.04	-1,246.39	1,496.47	1,450.02	46.45	32.219	
6,700.00	6,680.53	6,682.91	6,681.20	24.29	23.13	-131.83	-203.10	-1,246.96	1,502.91	1,455.74	47.18	31.858	
6,800.00	6,780.09	6,795.65	6,793.93	24.67	23.52	-132.12	-202.59	-1,246.47	1,508.66	1,460.72	47.93	31.473	
6,900.00	6,879.64	6,906.68	6,904.95	25.04	23.89	-132.43	-202.35	-1,244.87	1,513.62	1,464.94	48.68	31.094	
7,000.00	6,979.19	7,017.45	7,015.69	25.42	24.27	-132.74	-201.82	-1,242.51	1,517.88	1,468.46	49.42	30.715	
7,100.00	7,078.75	7,128.26	7,126.46	25.79	24.64	-133.04	-200.89	-1,239.44	1,521.45	1,471.29	50.16	30.334	
7,200.00	7,178.30	7,227.32	7,225.46	26.17	24.98	-133.31	-199.71	-1,236.24	1,524.49	1,473.63	50.86	29.974	

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Well Error: 0.00 usft
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Reference Design: Plan #3

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TVD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
MD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Midland District
Offset TVD Reference: Offset Datum

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Survey Program: 211-MWD													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 (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,300.00	7,277.85	7,310.40	7,308.51	26.55	25.26	-133.53	-198.82	-1,234.23	1,528.34	1,476.82	51.52	29.668		
7,400.00	7,377.41	7,396.13	7,394.22	26.92	25.55	-133.74	-198.12	-1,233.08	1,533.29	1,481.12	52.17	29.388		
7,500.00	7,476.96	7,495.82	7,493.81	27.30	25.89	-133.99	-197.38	-1,232.11	1,538.65	1,485.77	52.88	29.096		
7,600.00	7,576.51	7,592.06	7,590.15	27.67	26.22	-134.22	-196.72	-1,231.17	1,544.07	1,490.49	53.58	28.818		
7,700.00	7,676.07	7,679.19	7,677.27	28.05	26.52	-134.45	-196.69	-1,230.63	1,550.10	1,495.88	54.24	28.578		
7,800.00	7,775.62	7,768.59	7,766.67	28.42	26.83	-134.70	-197.48	-1,230.47	1,556.96	1,502.05	54.91	28.355		
7,900.00	7,875.18	7,878.64	7,876.69	28.80	27.21	-135.05	-199.50	-1,229.63	1,563.78	1,508.11	55.66	28.094		
8,000.00	7,974.73	7,983.57	7,981.57	29.18	27.57	-135.43	-202.33	-1,227.67	1,570.04	1,513.64	56.39	27.841		
8,100.00	8,074.28	8,081.09	8,078.06	29.55	27.90	-135.75	-204.30	-1,226.15	1,576.33	1,519.24	57.09	27.610		
8,139.51	8,113.61	8,119.67	8,117.63	29.70	28.03	-135.87	-204.79	-1,225.73	1,578.86	1,521.49	57.37	27.521		
8,200.00	8,173.89	8,178.46	8,176.42	29.93	28.24	-136.07	-205.29	-1,225.27	1,582.33	1,524.54	57.79	27.379		
8,300.00	8,273.73	8,275.62	8,273.58	30.29	28.58	-136.28	-205.74	-1,224.85	1,586.20	1,527.71	58.49	27.119		
8,400.00	8,373.70	8,385.74	8,383.70	30.64	28.96	-136.36	-205.79	-1,224.55	1,587.53	1,528.29	59.23	26.801		
8,410.34	8,384.04	8,398.49	8,396.45	30.68	29.00	-117.83	-205.79	-1,224.44	1,587.46	1,528.14	59.31	26.763		
8,450.00	8,423.67	8,447.34	8,445.29	30.81	29.17	-27.84	-205.76	-1,223.81	1,585.78	1,526.16	59.62	26.588		
8,500.00	8,473.34	8,508.39	8,506.33	30.97	29.38	-28.26	-205.71	-1,222.58	1,579.90	1,519.90	60.00	26.333		
8,550.00	8,522.32	8,557.71	8,555.63	31.12	29.55	-28.93	-205.65	-1,221.37	1,570.04	1,509.71	60.33	26.025		
8,600.00	8,570.26	8,605.58	8,603.49	31.27	29.71	-29.90	-205.57	-1,220.21	1,556.49	1,495.84	60.65	25.664		
8,650.00	8,616.77	8,651.92	8,649.81	31.40	29.87	-31.18	-205.48	-1,219.08	1,539.38	1,478.42	60.96	25.252		
8,700.00	8,661.52	8,696.38	8,694.26	31.52	30.03	-32.82	-205.36	-1,218.00	1,518.87	1,457.61	61.26	24.794		
8,750.00	8,704.15	8,738.97	8,736.84	31.64	30.17	-34.87	-205.21	-1,216.97	1,495.16	1,433.62	61.55	24.293		
8,800.00	8,744.35	8,779.05	8,776.91	31.74	30.31	-37.39	-205.01	-1,216.03	1,468.49	1,408.67	61.82	23.754		
8,850.00	8,781.81	8,816.30	8,814.14	31.82	30.44	-40.43	-204.76	-1,215.16	1,439.10	1,377.02	62.08	23.182		
8,900.00	8,816.24	8,850.42	8,848.26	31.90	30.55	-44.08	-204.48	-1,214.39	1,407.31	1,344.98	62.32	22.580		
8,950.00	8,847.37	8,881.17	8,878.99	31.96	30.66	-48.38	-204.20	-1,213.70	1,373.42	1,310.86	62.56	21.954		
9,000.00	8,874.99	8,905.29	8,903.11	32.05	30.74	-53.25	-203.97	-1,213.17	1,337.82	1,275.04	62.77	21.311		
9,050.00	8,898.86	8,925.05	8,922.86	32.26	30.81	-58.72	-203.82	-1,212.77	1,300.90	1,237.92	62.98	20.655		
9,100.00	8,918.82	8,941.52	8,939.33	32.50	30.87	-64.73	-203.73	-1,212.47	1,263.04	1,199.85	63.19	19.988		
9,150.00	8,934.71	8,954.54	8,952.35	32.76	30.91	-71.13	-203.67	-1,212.24	1,224.60	1,161.20	63.40	19.315		
9,200.00	8,946.41	8,963.98	8,961.79	33.05	30.94	-77.64	-203.65	-1,212.08	1,185.97	1,122.34	63.62	18.640		
9,250.00	8,953.82	8,969.75	8,967.56	33.37	30.96	-84.00	-203.63	-1,211.99	1,147.54	1,083.68	63.86	17.971		
9,300.00	8,956.90	8,971.75	8,969.56	33.71	30.97	-89.94	-203.63	-1,211.95	1,109.70	1,045.60	64.11	17.311		
9,310.34	8,957.00	8,971.69	8,969.50	33.78	30.97	-91.09	-203.63	-1,211.96	1,101.99	1,037.83	64.16	17.176		
9,400.00	8,957.00	8,970.45	8,968.25	34.46	30.97	-90.99	-203.63	-1,211.97	1,037.03	972.33	64.70	16.029		
9,500.00	8,957.00	8,969.04	8,966.85	35.35	30.96	-90.88	-203.64	-1,212.00	969.24	903.76	65.48	14.802		
9,600.00	8,957.00	8,967.62	8,965.43	36.35	30.96	-90.77	-203.64	-1,212.02	907.42	840.94	66.48	13.650		
9,700.00	8,957.00	8,966.17	8,963.98	37.47	30.95	-90.66	-203.64	-1,212.04	852.88	785.17	67.71	12.597		
9,800.00	8,957.00	8,964.71	8,962.52	38.69	30.95	-90.55	-203.64	-1,212.07	807.08	737.94	69.14	11.673		
9,900.00	8,957.00	8,963.22	8,961.03	40.01	30.94	-90.43	-203.65	-1,212.09	771.59	700.87	70.72	10.911		
10,000.00	8,957.00	8,961.72	8,959.52	41.40	30.94	-90.31	-203.65	-1,212.12	747.88	675.56	72.31	10.342		
10,100.00	8,957.00	8,960.19	8,958.00	42.88	30.93	-90.19	-203.66	-1,212.14	737.08	663.30	73.78	9.991		
10,130.20	8,957.00	8,959.72	8,957.53	43.35	30.93	-90.16	-203.66	-1,212.15	736.46	662.28	74.17	9.929 CC ES		
10,200.00	8,957.00	8,958.84	8,956.44	44.43	30.93	-90.07	-203.66	-1,212.17	739.76	664.80	74.96	9.869 SF		
10,300.00	8,957.00	8,957.06	8,954.87	46.03	30.92	-89.95	-203.67	-1,212.19	755.77	680.00	75.77	9.974		
10,400.00	8,957.00	8,955.47	8,953.27	47.70	30.91	-89.83	-203.67	-1,212.22	784.31	708.11	76.20	10.293		
10,500.00	8,957.00	8,953.84	8,951.65	49.41	30.91	-89.70	-203.68	-1,212.25	824.07	747.79	76.28	10.803		
10,600.00	8,957.00	8,952.20	8,950.01	51.17	30.90	-89.57	-203.68	-1,212.28	873.51	797.41	76.10	11.478		
10,700.00	8,957.00	8,950.53	8,948.34	52.97	30.90	-89.44	-203.69	-1,212.31	931.10	855.35	75.75	12.292		
10,800.00	8,957.00	8,948.83	8,946.64	54.81	30.89	-89.31	-203.69	-1,212.34	995.43	920.13	75.30	13.220		
10,900.00	8,957.00	8,947.11	8,944.92	56.68	30.89	-89.18	-203.70	-1,212.37	1,065.27	990.47	74.80	14.241		
11,000.00	8,957.00	8,945.36	8,943.17	58.58	30.88	-89.04	-203.71	-1,212.40	1,139.61	1,065.31	74.29	15.339		
11,100.00	8,957.00	8,943.59	8,941.40	60.51	30.87	-88.90	-203.72	-1,212.43	1,217.63	1,143.83	73.80	16.499		

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

Scientific Drilling, Intl

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico (NAD 83)
Reference Site: Boxer 32-22-27 Fee Pad
Site Error: 0.00 usft
Reference Well: Boxer 32-22-27 Fee 401H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #3

Local Co-ordinate Reference: Well Boxer 32-22-27 Fee 401H
TVD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
MD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Midland District
Offset TVD Reference: Offset Datum

Offset Design Boxer 32-22-27 Fee Pad - Cascade Fee #1 - Wellbore #1 - As Drilled													Offset Site Error:	0.00 usft
Survey Program: 211-MWD													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 (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
11,200.00	8,957.00	8,941.78	8,939.59	62.46	30.87	-88.76	-203.72	-1,212.46	1,298.66	1,225.33	73.33	17.709		
11,300.00	8,957.00	8,939.95	8,937.76	64.44	30.86	-88.62	-203.73	-1,212.49	1,382.18	1,309.28	72.89	18.961		
11,400.00	8,957.00	8,938.09	8,935.90	66.44	30.86	-88.48	-203.74	-1,212.53	1,467.75	1,395.26	72.49	20.247		
11,500.00	8,957.00	8,936.20	8,934.01	68.45	30.85	-88.33	-203.75	-1,212.56	1,555.05	1,482.93	72.12	21.561		
11,600.00	8,957.00	8,934.27	8,932.09	70.48	30.84	-88.18	-203.76	-1,212.60	1,643.79	1,572.00	71.79	22.898		
11,700.00	8,957.00	8,932.32	8,930.13	72.53	30.84	-88.03	-203.77	-1,212.63	1,733.76	1,662.28	71.48	24.255		
11,800.00	8,957.00	8,930.33	8,928.15	74.59	30.83	-87.87	-203.78	-1,212.67	1,824.77	1,753.56	71.20	25.627		
11,900.00	8,957.00	8,928.31	8,926.13	76.67	30.82	-87.72	-203.80	-1,212.71	1,916.67	1,845.72	70.95	27.014		
12,000.00	8,957.00	8,926.26	8,924.08	78.76	30.81	-87.56	-203.81	-1,212.75	2,009.35	1,938.62	70.72	28.412		
12,100.00	8,957.00	8,924.17	8,921.99	80.86	30.81	-87.40	-203.82	-1,212.79	2,102.69	2,032.18	70.51	29.819		
12,200.00	8,957.00	8,922.05	8,919.86	82.96	30.80	-87.23	-203.84	-1,212.83	2,196.62	2,126.29	70.33	31.235		
12,300.00	8,957.00	8,919.89	8,917.71	85.08	30.79	-87.06	-203.85	-1,212.87	2,291.06	2,220.91	70.15	32.657		
12,400.00	8,957.00	8,917.69	8,915.51	87.21	30.78	-86.89	-203.87	-1,212.92	2,385.95	2,315.95	70.00	34.086		
12,500.00	8,957.00	8,915.46	8,913.27	89.35	30.78	-86.72	-203.88	-1,212.96	2,481.24	2,411.39	69.86	35.519		
12,600.00	8,957.00	8,913.18	8,911.00	91.49	30.77	-86.54	-203.90	-1,213.01	2,576.89	2,507.16	69.73	36.957		
12,700.00	8,957.00	8,910.86	8,908.68	93.64	30.76	-86.36	-203.92	-1,213.06	2,672.85	2,603.24	69.61	38.398		
12,800.00	8,957.00	8,908.51	8,906.32	95.80	30.75	-86.18	-203.94	-1,213.10	2,769.10	2,699.60	69.50	39.842		
12,900.00	8,957.00	8,906.11	8,903.92	97.96	30.74	-86.00	-203.96	-1,213.15	2,865.60	2,796.20	69.40	41.288		
13,000.00	8,957.00	8,903.66	8,901.48	100.13	30.74	-85.81	-203.98	-1,213.21	2,962.34	2,893.02	69.32	42.737		
13,100.00	8,957.00	8,901.17	8,898.99	102.31	30.73	-85.61	-204.00	-1,213.26	3,059.28	2,990.04	69.24	44.187		
13,200.00	8,957.00	8,898.64	8,896.46	104.49	30.72	-85.42	-204.02	-1,213.31	3,156.41	3,087.24	69.16	45.637		
13,300.00	8,957.00	8,896.05	8,893.87	106.68	30.71	-85.22	-204.05	-1,213.37	3,253.71	3,184.61	69.10	47.089		
13,400.00	8,957.00	8,893.42	8,891.24	108.86	30.70	-85.02	-204.07	-1,213.43	3,351.17	3,282.13	69.04	48.542		
13,489.49	8,957.00	8,891.02	8,888.84	110.93	30.69	-84.83	-204.10	-1,213.48	3,438.51	3,369.52	68.99	49.842		

Scientific Drilling, Intl
Anticollision Report

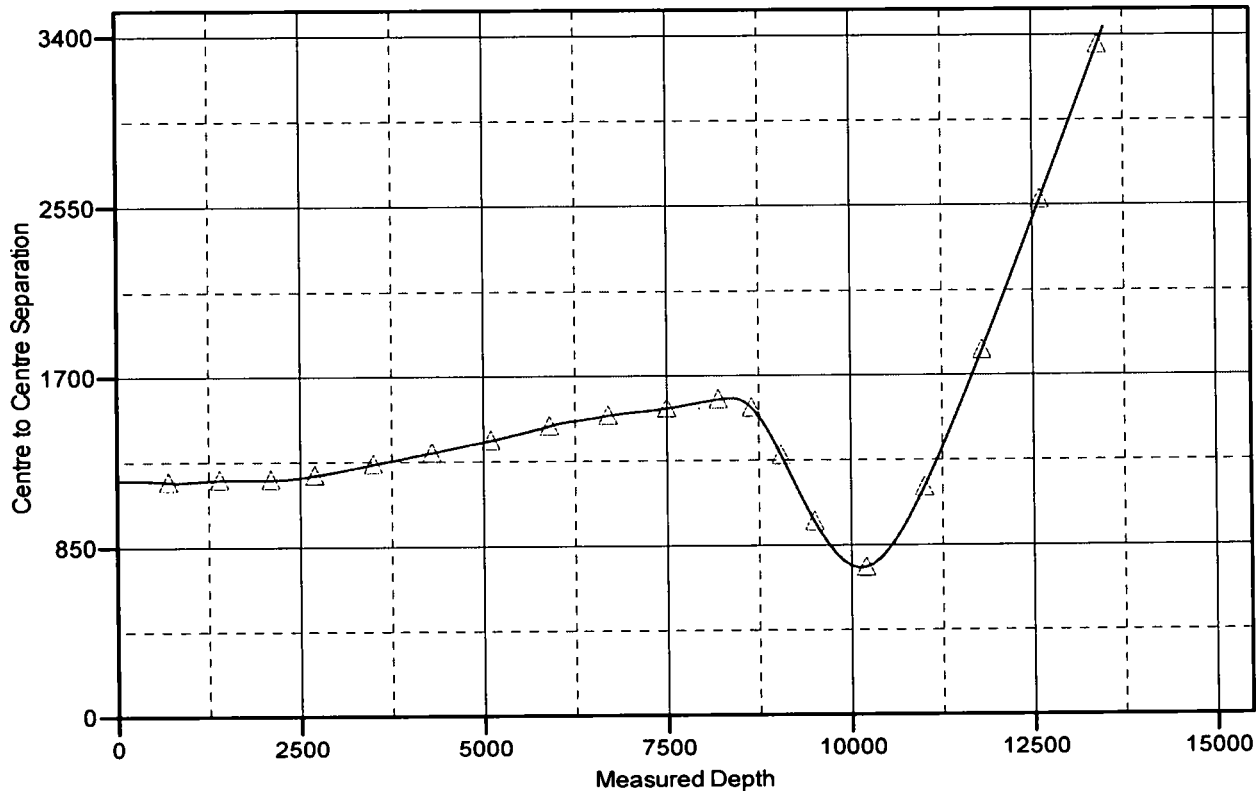
Company: WPX Energy
Project: Eddy County, New Mexico (NAD 83)
Reference Site: Boxer 32-22-27 Fee Pad
Site Error: 0.00 usft
Reference Well: Boxer 32-22-27 Fee 401H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #3

Local Co-ordinate Reference: Well Boxer 32-22-27 Fee 401H
TVD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
MD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Midland District
Offset TVD Reference: Offset Datum

Reference Depths are relative to GL 3153 + KB 26 = @ 3179.00usft (H)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Boxer 32-22-27 Fee 401H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.07°

Ladder Plot



LEGEND

▲ Cascade Fee #1, Wellbore #1, As Drilled V0

Scientific Drilling, Intl
Anticollision Report

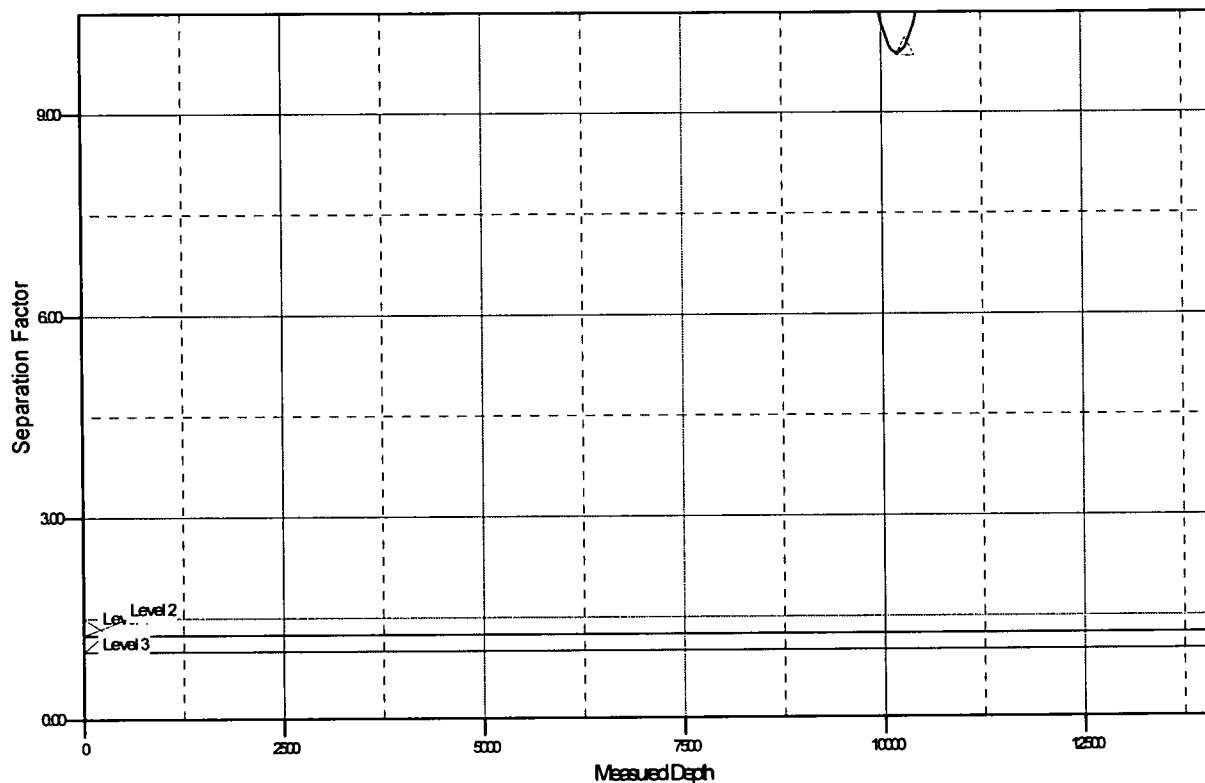
Company: WPX Energy
Project: Eddy County, New Mexico (NAD 83)
Reference Site: Boxer 32-22-27 Fee Pad
Site Error: 0.00 usft
Reference Well: Boxer 32-22-27 Fee 401H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #3

Local Co-ordinate Reference: Well Boxer 32-22-27 Fee 401H
TVD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
MD Reference: GL 3153 + KB 26 = @ 3179.00usft (HP 265)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: Midland District
Offset TVD Reference: Offset Datum

Reference Depths are relative to GL 3153 + KB 26 = @ 3179.00usft (H)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Boxer 32-22-27 Fee 401H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.07°

Separation Factor Plot



LEGEND

▲ Cascade Fee #1, Wellbore #1, As Drilled VO

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