

NM OIL CONSERVATION

ARTESIA DISTRICT

NOV 02 2017

RECEIVED

WPX Energy

Eddy County, New Mexico NAD 83

C 17 State Pad

C 17 State 1H

API:

Wellbore #1

30.015-44534

Plan: Plan #1

Standard Planning Report

11 October, 2017



Scientific Drilling

www.scientificdrilling.com



GL 3154 + KB 22 @ 3176.00usft (Orion Pegasus)



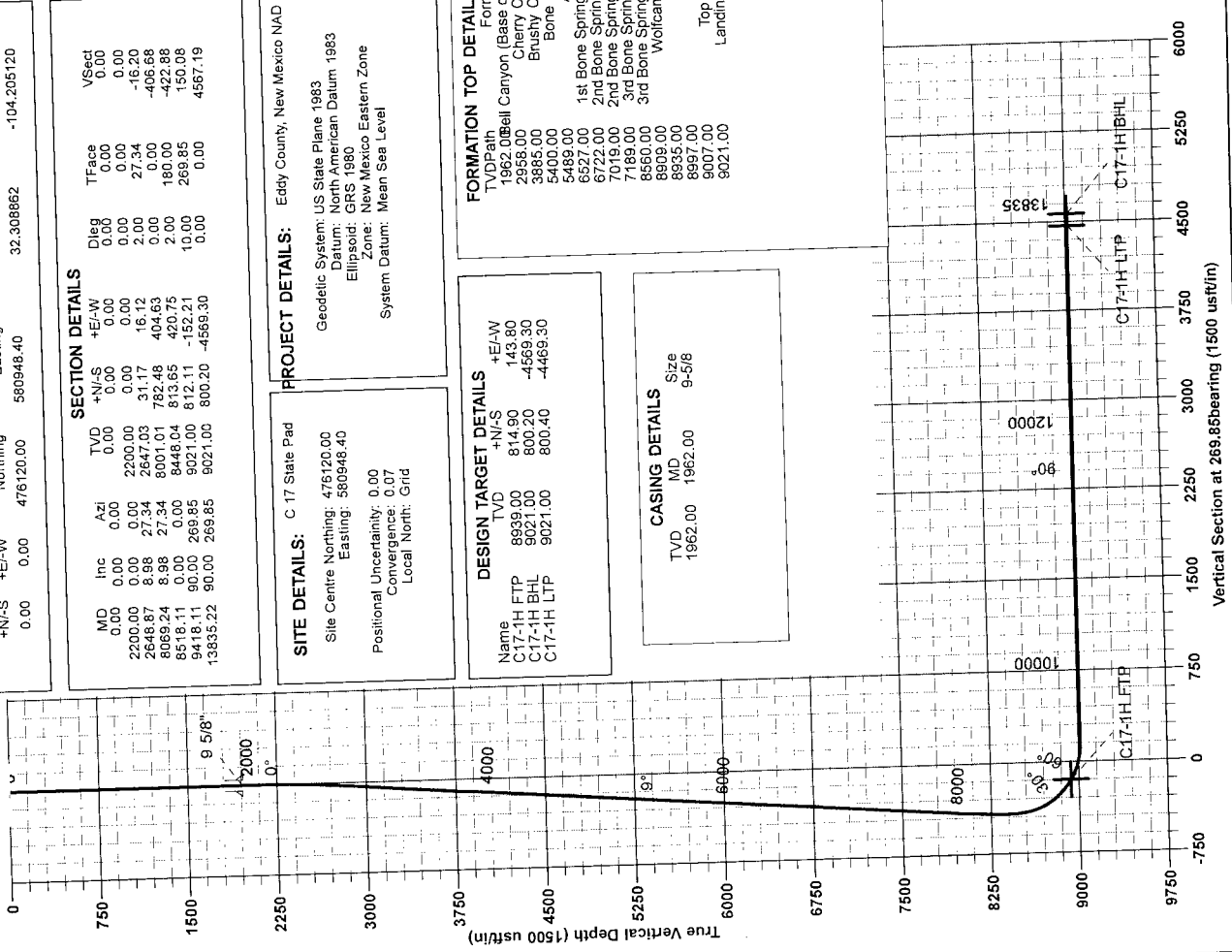
WELL DETAILS C 17 State 1H			
Ground Level: 3154.00			
	+N/-S	+E/-W	Longitude
	0.00	0.00	32.308862

SECTION DETAILS									
	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00
	2648.87	8.98	27.34	2647.03	3.17	16.12	2.00	27.34	-16.20
	8069.24	8.98	27.34	8001.01	782.48	404.63	0.00	0.00	-406.68
	8518.11	0.00	0.00	8448.04	813.85	420.75	2.00	180.00	-422.88
	9418.11	90.00	269.85	9021.00	812.11	-152.21	10.00	269.85	150.08
	13835.22	90.00	269.85	9021.00	800.20	-4569.30	0.00	0.00	4567.19

SITE DETAILS:		PROJECT DETAILS:	
C 17 State Pad		Eddy County, New Mexico NAD 83	
Site Centre Northing: 476120.00 Easting: 580948.40		Geodetic System: US State Plane 1983 Datum: North American Datum 1983	
Positional Uncertainty: 0.00 Convergence: 0.07 Local North: Grid		Ellipsoid: GRS 1980 Zone: New Mexico Eastern Zone System Datum: Mean Sea Level	

DESIGN TARGET DETAILS			FORMATION TOP DETAILS		
Name	TVD	+N/-S	Formation	TVDPath	+E/-W
C17-1H FTP	8939.00	814.90	1962.00 Bell Canyon (Base of Salt)	1962.00	143.80
C17-1H BHL	9021.00	800.20	Cherry Canyon	2958.00	-4569.30
C17-1H LTP	9021.00	800.40	Brushy Canyon	3885.00	-4469.30

CASING DETAILS		
TVD	MD	Size
1962.00	1962.00	9-5/8



Azimuths to Grid North
True North: -0.07°
Magnetic North: 7.31°
Magnetic Field
Strength: 48067.8nT
Dip Angle: 60.10°
Date: 10/11/2017
Model: HDGM

To convert Magnetic North to Grid, Add 7.31°
To convert True North to Grid, Subtract 0.07°

12:5 Bailey Fellows 2017
325 S Pacific Drilling Rd.
Odessa, TX 79765

Scientific Drilling Int.

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C 17 State 1H
Company:	WPX Energy	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site:	C 17 State Pad	North Reference:	Grid
Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County, New Mexico NAD 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	C 17 State Pad		
Site Position:		Northing:	476,120.00 usft
From:	Map	Easting:	580,948.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.308862
		Longitude:	-104.205120
		Grid Convergence:	0.07 °

Well	C 17 State 1H		
Well Position	+N/-S	0.00 usft	Northing: 476,120.00 usft
	+E/-W	0.00 usft	Easting: 580,948.40 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.308862
		Longitude:	-104.205120
		Ground Level:	3,154.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	10/11/2017	7.38
		Dip Angle (°)	60.10
		Field Strength (nT)	48,068

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
		Direction (bearing)	269.85

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,648.87	8.98	27.34	2,647.03	31.17	16.12	2.00	2.00	0.00	27.34	
8,069.24	8.98	27.34	8,001.01	782.48	404.63	0.00	0.00	0.00	0.00	
8,518.11	0.00	0.00	8,448.04	813.65	420.75	2.00	-2.00	0.00	180.00	
9,418.11	90.00	269.85	9,021.00	812.11	-152.21	10.00	10.00	-10.02	269.85	
13,835.22	90.00	269.85	9,021.00	800.20	-4,569.30	0.00	0.00	0.00	0.00	C17-1H BHL

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Planning Report

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Company:	WPX Energy	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site:	C 17 State Pad	North Reference:	Grid
Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,962.00	0.00	0.00	1,962.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon (Base of Salt) - 9 5/8"									
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	2.00	27.34	2,299.98	1.55	0.80	-0.81	2.00	2.00	0.00
2,400.00	4.00	27.34	2,399.84	6.20	3.21	-3.22	2.00	2.00	0.00
2,500.00	6.00	27.34	2,499.45	13.94	7.21	-7.25	2.00	2.00	0.00
2,600.00	8.00	27.34	2,598.70	24.76	12.81	-12.87	2.00	2.00	0.00
2,648.87	8.98	27.34	2,647.03	31.17	16.12	-16.20	2.00	2.00	0.00
2,700.00	8.98	27.34	2,697.54	38.26	19.78	-19.88	0.00	0.00	0.00
2,800.00	8.98	27.34	2,796.31	52.12	26.95	-27.09	0.00	0.00	0.00
2,900.00	8.98	27.34	2,895.09	65.98	34.12	-34.29	0.00	0.00	0.00
2,963.69	8.98	27.34	2,958.00	74.81	38.68	-38.88	0.00	0.00	0.00
Cherry Canyon									
3,000.00	8.98	27.34	2,993.86	79.84	41.29	-41.50	0.00	0.00	0.00
3,100.00	8.98	27.34	3,092.64	93.70	48.45	-48.70	0.00	0.00	0.00
3,200.00	8.98	27.34	3,191.41	107.56	55.62	-55.90	0.00	0.00	0.00
3,300.00	8.98	27.34	3,290.19	121.42	62.79	-63.11	0.00	0.00	0.00
3,400.00	8.98	27.34	3,388.96	135.28	69.96	-70.31	0.00	0.00	0.00
3,500.00	8.98	27.34	3,487.74	149.15	77.13	-77.52	0.00	0.00	0.00
3,600.00	8.98	27.34	3,586.51	163.01	84.29	-84.72	0.00	0.00	0.00
3,700.00	8.98	27.34	3,685.29	176.87	91.46	-91.92	0.00	0.00	0.00
3,800.00	8.98	27.34	3,784.06	190.73	98.63	-99.13	0.00	0.00	0.00
3,900.00	8.98	27.34	3,882.84	204.59	105.80	-106.33	0.00	0.00	0.00
3,902.19	8.98	27.34	3,885.00	204.89	105.95	-106.49	0.00	0.00	0.00
Brushy Canyon									
4,000.00	8.98	27.34	3,981.61	218.45	112.96	-113.53	0.00	0.00	0.00
4,100.00	8.98	27.34	4,080.39	232.31	120.13	-120.74	0.00	0.00	0.00
4,200.00	8.98	27.34	4,179.16	246.17	127.30	-127.94	0.00	0.00	0.00
4,300.00	8.98	27.34	4,277.94	260.03	134.47	-135.15	0.00	0.00	0.00
4,400.00	8.98	27.34	4,376.71	273.89	141.63	-142.35	0.00	0.00	0.00

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Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
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Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.00	8.98	27.34	4,475.49	287.75	148.80	-149.55	0.00	0.00	0.00
4,600.00	8.98	27.34	4,574.26	301.61	155.97	-156.76	0.00	0.00	0.00
4,700.00	8.98	27.34	4,673.04	315.48	163.14	-163.96	0.00	0.00	0.00
4,800.00	8.98	27.34	4,771.81	329.34	170.30	-171.17	0.00	0.00	0.00
4,900.00	8.98	27.34	4,870.59	343.20	177.47	-178.37	0.00	0.00	0.00
5,000.00	8.98	27.34	4,969.36	357.06	184.64	-185.57	0.00	0.00	0.00
5,100.00	8.98	27.34	5,068.14	370.92	191.81	-192.78	0.00	0.00	0.00
5,200.00	8.98	27.34	5,166.91	384.78	198.97	-199.98	0.00	0.00	0.00
5,300.00	8.98	27.34	5,265.69	398.64	206.14	-207.19	0.00	0.00	0.00
5,400.00	8.98	27.34	5,364.46	412.50	213.31	-214.39	0.00	0.00	0.00
5,435.98	8.98	27.34	5,400.00	417.49	215.89	-216.98	0.00	0.00	0.00
Bone Spring									
5,500.00	8.98	27.34	5,463.24	426.36	220.48	-221.59	0.00	0.00	0.00
5,526.08	8.98	27.34	5,489.00	429.98	222.35	-223.47	0.00	0.00	0.00
Avalon									
5,600.00	8.98	27.34	5,562.01	440.22	227.65	-228.80	0.00	0.00	0.00
5,700.00	8.98	27.34	5,660.79	454.08	234.81	-236.00	0.00	0.00	0.00
5,800.00	8.98	27.34	5,759.56	467.94	241.98	-243.20	0.00	0.00	0.00
5,900.00	8.98	27.34	5,858.34	481.80	249.15	-250.41	0.00	0.00	0.00
6,000.00	8.98	27.34	5,957.12	495.67	256.32	-257.61	0.00	0.00	0.00
6,100.00	8.98	27.34	6,055.89	509.53	263.48	-264.82	0.00	0.00	0.00
6,200.00	8.98	27.34	6,154.67	523.39	270.65	-272.02	0.00	0.00	0.00
6,300.00	8.98	27.34	6,253.44	537.25	277.82	-279.22	0.00	0.00	0.00
6,400.00	8.98	27.34	6,352.22	551.11	284.99	-286.43	0.00	0.00	0.00
6,500.00	8.98	27.34	6,450.99	564.97	292.15	-293.63	0.00	0.00	0.00
6,576.95	8.98	27.34	6,527.00	575.64	297.67	-299.18	0.00	0.00	0.00
1st Bone Spring Sand									
6,600.00	8.98	27.34	6,549.77	578.83	299.32	-300.84	0.00	0.00	0.00
6,700.00	8.98	27.34	6,648.54	592.69	306.49	-308.04	0.00	0.00	0.00
6,774.37	8.98	27.34	6,722.00	603.00	311.82	-313.40	0.00	0.00	0.00
2nd Bone Spring Lime									
6,800.00	8.98	27.34	6,747.32	606.55	313.66	-315.24	0.00	0.00	0.00
6,900.00	8.98	27.34	6,846.09	620.41	320.82	-322.45	0.00	0.00	0.00
7,000.00	8.98	27.34	6,944.87	634.27	327.99	-329.65	0.00	0.00	0.00
7,075.05	8.98	27.34	7,019.00	644.68	333.37	-335.06	0.00	0.00	0.00
2nd Bone Spring Sand									
7,100.00	8.98	27.34	7,043.64	648.13	335.16	-336.85	0.00	0.00	0.00
7,200.00	8.98	27.34	7,142.42	661.99	342.33	-344.06	0.00	0.00	0.00
7,247.16	8.98	27.34	7,189.00	668.53	345.71	-347.46	0.00	0.00	0.00
3rd Bone Spring Lime									
7,300.00	8.98	27.34	7,241.19	675.86	349.49	-351.26	0.00	0.00	0.00
7,400.00	8.98	27.34	7,339.97	689.72	356.66	-358.47	0.00	0.00	0.00
7,500.00	8.98	27.34	7,438.74	703.58	363.83	-365.67	0.00	0.00	0.00
7,600.00	8.98	27.34	7,537.52	717.44	371.00	-372.87	0.00	0.00	0.00
7,700.00	8.98	27.34	7,636.29	731.30	378.16	-380.08	0.00	0.00	0.00
7,800.00	8.98	27.34	7,735.07	745.16	385.33	-387.28	0.00	0.00	0.00
7,900.00	8.98	27.34	7,833.84	759.02	392.50	-394.49	0.00	0.00	0.00
8,000.00	8.98	27.34	7,932.62	772.88	399.67	-401.69	0.00	0.00	0.00
8,069.24	8.98	27.34	8,001.01	782.48	404.63	-406.68	0.00	0.00	0.00
8,100.00	8.36	27.34	8,031.42	786.60	406.76	-408.82	2.00	-2.00	0.00
8,200.00	6.36	27.34	8,130.59	797.98	412.65	-414.73	2.00	-2.00	0.00

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Company:	WPX Energy	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site:	C 17 State Pad	North Reference:	Grid
Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,300.00	4.36	27.34	8,230.14	806.28	416.94	-419.05	2.00	-2.00	0.00
8,400.00	2.36	27.34	8,329.97	811.49	419.63	-421.75	2.00	-2.00	0.00
8,500.00	0.36	27.34	8,429.93	813.60	420.72	-422.85	2.00	-2.00	0.00
8,518.11	0.00	0.00	8,448.04	813.65	420.75	-422.88	2.00	-2.00	0.00
8,550.00	3.19	269.85	8,479.92	813.65	419.86	-421.99	10.00	10.00	0.00
8,600.00	8.19	269.85	8,529.65	813.63	414.91	-417.04	10.00	10.00	0.00
8,630.79	11.27	269.85	8,560.00	813.62	409.70	-411.83	10.00	10.00	0.00
3rd Bone Spring Sand									
8,650.00	13.19	269.85	8,578.77	813.61	405.64	-407.77	10.00	10.00	0.00
8,700.00	18.19	269.85	8,626.89	813.57	392.12	-394.25	10.00	10.00	0.00
8,750.00	23.19	269.85	8,673.65	813.53	374.46	-376.59	10.00	10.00	0.00
8,800.00	28.19	269.85	8,718.70	813.47	352.79	-354.92	10.00	10.00	0.00
8,850.00	33.19	269.85	8,761.68	813.40	327.28	-329.41	10.00	10.00	0.00
8,900.00	38.19	269.85	8,802.28	813.32	298.12	-300.25	10.00	10.00	0.00
8,950.00	43.19	269.85	8,840.18	813.23	265.53	-267.66	10.00	10.00	0.00
9,000.00	48.19	269.85	8,875.09	813.14	229.77	-231.90	10.00	10.00	0.00
9,050.00	53.19	269.85	8,906.76	813.03	191.09	-193.22	10.00	10.00	0.00
9,053.75	53.56	269.85	8,909.00	813.02	188.08	-190.21	10.00	10.00	0.00
Wolfcamp Top									
9,100.00	58.19	269.85	8,934.94	812.92	149.81	-151.94	10.00	10.00	0.00
9,100.12	58.19	269.85	8,935.00	812.92	149.70	-151.83	0.00	0.00	0.00
WC_X									
9,150.00	63.19	269.85	8,959.41	812.80	106.22	-108.35	10.02	10.02	0.00
9,200.00	68.19	269.85	8,979.98	812.68	60.67	-62.80	10.00	10.00	0.00
9,250.00	73.19	269.85	8,996.51	812.55	13.50	-15.63	10.00	10.00	0.00
9,251.69	73.36	269.85	8,997.00	812.55	11.88	-14.00	10.00	10.00	0.00
WC_Y									
9,291.20	77.31	269.85	9,007.00	812.44	-26.33	24.20	10.00	10.00	0.00
Top Target									
9,300.00	78.19	269.85	9,008.87	812.42	-34.93	32.81	10.00	10.00	0.00
9,350.00	83.19	269.85	9,016.95	812.29	-84.26	82.13	10.00	10.00	0.00
9,400.00	88.19	269.85	9,020.71	812.15	-134.10	131.97	10.00	10.00	0.00
9,418.11	90.00	269.85	9,021.00	812.11	-152.21	150.08	10.00	10.00	0.00
Landing Point									
9,500.00	90.00	269.85	9,021.00	811.88	-234.10	231.97	0.00	0.00	0.00
9,600.00	90.00	269.85	9,021.00	811.62	-334.10	331.97	0.00	0.00	0.00
9,700.00	90.00	269.85	9,021.00	811.35	-434.10	431.97	0.00	0.00	0.00
9,800.00	90.00	269.85	9,021.00	811.08	-534.10	531.97	0.00	0.00	0.00
9,900.00	90.00	269.85	9,021.00	810.81	-634.10	631.97	0.00	0.00	0.00
10,000.00	90.00	269.85	9,021.00	810.54	-734.10	731.97	0.00	0.00	0.00
10,100.00	90.00	269.85	9,021.00	810.27	-834.10	831.97	0.00	0.00	0.00
10,200.00	90.00	269.85	9,021.00	810.00	-934.10	931.97	0.00	0.00	0.00
10,300.00	90.00	269.85	9,021.00	809.73	-1,034.10	1,031.97	0.00	0.00	0.00
10,400.00	90.00	269.85	9,021.00	809.46	-1,134.09	1,131.97	0.00	0.00	0.00
10,500.00	90.00	269.85	9,021.00	809.19	-1,234.09	1,231.97	0.00	0.00	0.00
10,600.00	90.00	269.85	9,021.00	808.92	-1,334.09	1,331.97	0.00	0.00	0.00
10,700.00	90.00	269.85	9,021.00	808.65	-1,434.09	1,431.97	0.00	0.00	0.00
10,800.00	90.00	269.85	9,021.00	808.38	-1,534.09	1,531.97	0.00	0.00	0.00
10,900.00	90.00	269.85	9,021.00	808.11	-1,634.09	1,631.97	0.00	0.00	0.00
11,000.00	90.00	269.85	9,021.00	807.84	-1,734.09	1,731.97	0.00	0.00	0.00
11,100.00	90.00	269.85	9,021.00	807.57	-1,834.09	1,831.97	0.00	0.00	0.00

Scientific Drilling Int.

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C 17 State 1H
Company:	WPX Energy	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site:	C 17 State Pad	North Reference:	Grid
Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,200.00	90.00	269.85	9,021.00	807.30	-1,934.09	1,931.97	0.00	0.00	0.00
11,300.00	90.00	269.85	9,021.00	807.03	-2,034.09	2,031.97	0.00	0.00	0.00
11,400.00	90.00	269.85	9,021.00	806.76	-2,134.09	2,131.97	0.00	0.00	0.00
11,500.00	90.00	269.85	9,021.00	806.49	-2,234.09	2,231.97	0.00	0.00	0.00
11,600.00	90.00	269.85	9,021.00	806.22	-2,334.09	2,331.97	0.00	0.00	0.00
11,700.00	90.00	269.85	9,021.00	805.96	-2,434.09	2,431.97	0.00	0.00	0.00
11,800.00	90.00	269.85	9,021.00	805.69	-2,534.09	2,531.97	0.00	0.00	0.00
11,900.00	90.00	269.85	9,021.00	805.42	-2,634.09	2,631.97	0.00	0.00	0.00
12,000.00	90.00	269.85	9,021.00	805.15	-2,734.09	2,731.97	0.00	0.00	0.00
12,100.00	90.00	269.85	9,021.00	804.88	-2,834.09	2,831.97	0.00	0.00	0.00
12,200.00	90.00	269.85	9,021.00	804.61	-2,934.09	2,931.97	0.00	0.00	0.00
12,300.00	90.00	269.85	9,021.00	804.34	-3,034.09	3,031.97	0.00	0.00	0.00
12,400.00	90.00	269.85	9,021.00	804.07	-3,134.09	3,131.97	0.00	0.00	0.00
12,500.00	90.00	269.85	9,021.00	803.80	-3,234.09	3,231.97	0.00	0.00	0.00
12,600.00	90.00	269.85	9,021.00	803.53	-3,334.09	3,331.97	0.00	0.00	0.00
12,700.00	90.00	269.85	9,021.00	803.26	-3,434.09	3,431.97	0.00	0.00	0.00
12,800.00	90.00	269.85	9,021.00	802.99	-3,534.09	3,531.97	0.00	0.00	0.00
12,900.00	90.00	269.85	9,021.00	802.72	-3,634.09	3,631.97	0.00	0.00	0.00
13,000.00	90.00	269.85	9,021.00	802.45	-3,734.09	3,731.97	0.00	0.00	0.00
13,100.00	90.00	269.85	9,021.00	802.18	-3,834.09	3,831.97	0.00	0.00	0.00
13,200.00	90.00	269.85	9,021.00	801.91	-3,934.08	3,931.97	0.00	0.00	0.00
13,300.00	90.00	269.85	9,021.00	801.64	-4,034.08	4,031.97	0.00	0.00	0.00
13,400.00	90.00	269.85	9,021.00	801.37	-4,134.08	4,131.97	0.00	0.00	0.00
13,500.00	90.00	269.85	9,021.00	801.10	-4,234.08	4,231.97	0.00	0.00	0.00
13,600.00	90.00	269.85	9,021.00	800.83	-4,334.08	4,331.97	0.00	0.00	0.00
13,700.00	90.00	269.85	9,021.00	800.56	-4,434.08	4,431.97	0.00	0.00	0.00
13,800.00	90.00	269.85	9,021.00	800.29	-4,534.08	4,531.97	0.00	0.00	0.00
13,835.22	90.00	269.85	9,021.00	800.20	-4,569.30	4,567.19	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
C17-1H FTP - plan misses target center by 2.02usft at 9107.23usft MD (8938.71 TVD, 812.90 N, 143.64 E) - Point	0.00	0.00	8,939.00	814.90	143.80	476,934.90	581,092.20	32.311101	-104.204651
C17-1H LTP - plan misses target center by 0.07usft at 13735.22usft MD (9021.00 TVD, 800.47 N, -4469.30 E) - Point	0.00	0.00	9,021.00	800.40	-4,469.30	476,920.40	576,479.10	32.311076	-104.219584
C17-1H BHL - plan hits target center - Point	0.00	0.00	9,021.00	800.20	-4,569.30	476,920.20	576,379.10	32.311076	-104.219907

Scientific Drilling Int.

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well C 17 State 1H
Company:	WPX Energy	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site:	C 17 State Pad	North Reference:	Grid
Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,962.00	1,962.00	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
1,962.00	1,962.00	Bell Canyon (Base of Salt)			
2,963.69	2,958.00	Cherry Canyon			
3,902.19	3,885.00	Brushy Canyon			
5,435.98	5,400.00	Bone Spring			
5,526.08	5,489.00	Avalon			
6,576.95	6,527.00	1st Bone Spring Sand			
6,774.37	6,722.00	2nd Bone Spring Lime			
7,075.05	7,019.00	2nd Bone Spring Sand			
7,247.16	7,189.00	3rd Bone Spring Lime			
8,630.79	8,560.00	3rd Bone Spring Sand			
9,053.75	8,909.00	Wolfcamp Top			
9,100.12	8,935.00	WC_X			
9,251.69	8,997.00	WC_Y			
9,291.20	9,007.00	Top Target			
9,418.11	9,021.00	Landing Point			

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WPX Energy

Eddy County, New Mexico NAD 83

C 17 State Pad

C 17 State 1H

API:

Wellbore #1

Plan #1

Anticollision Report

11 October, 2017



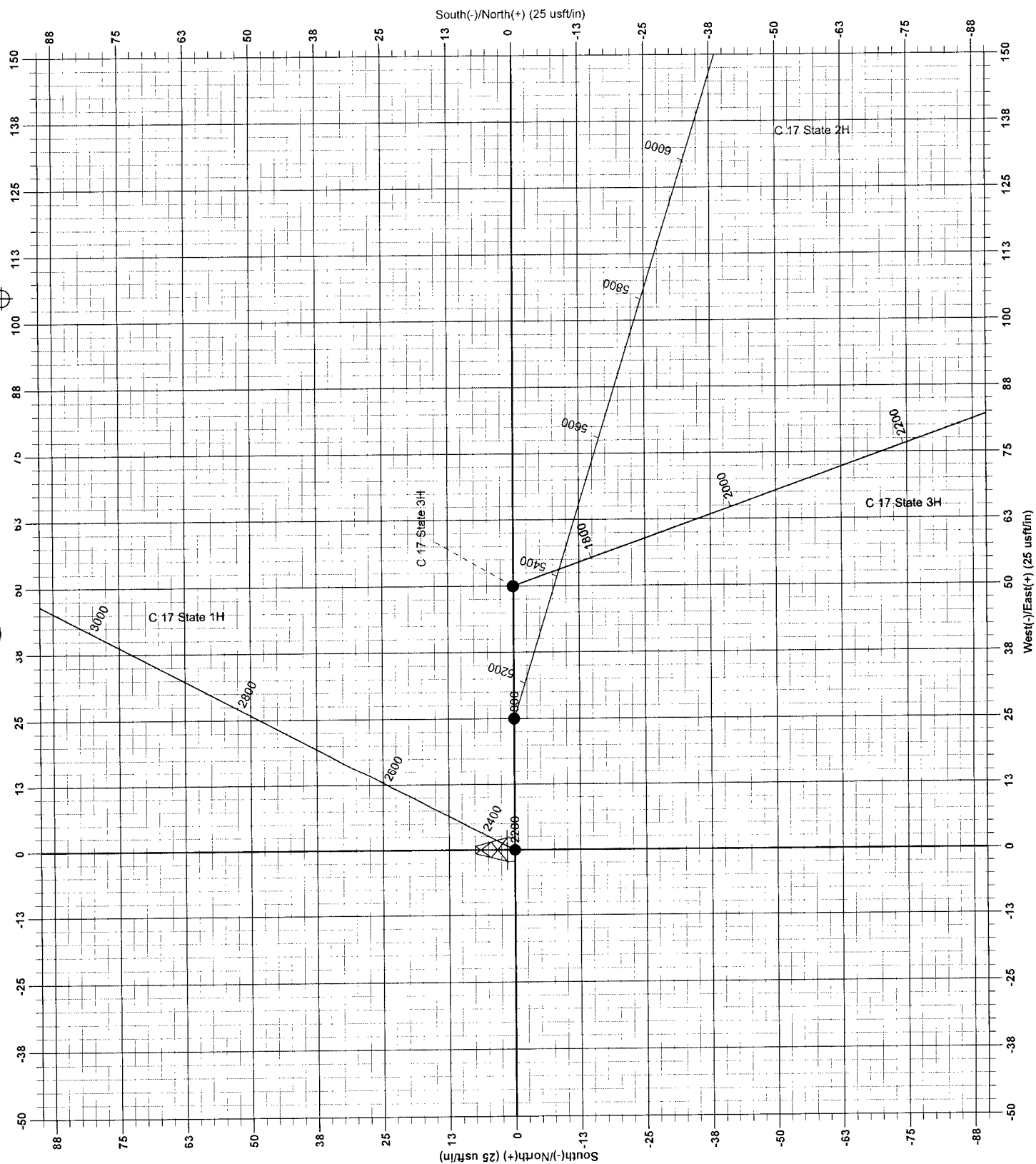
www.scientificdrilling.com



To convert Magnetic North to Grid, Add 7.31°
To convert True North to Grid, Subtract 0.07°



Magnetic North: 7.31°
Magnetic Field
Strength: 48067.8nT
Dip Angle: 60.10°
Date: 10/11/2017
Model: HDGM



Scientific Drilling Int.

Anticollision Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well C 17 State 1H
Project:	Eddy County, New Mexico NAD 83	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Reference Site:	C 17 State Pad	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Midland District
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date 10/11/2017	
From (usft)	To (usft)	Survey (Wellbore)
0.00	13,835.22	Plan #1 (Wellbore #1)
		Tool Name
		MWD+HDGM
		Description
		OWSG MWD + HDGM

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						
C 17 State Pad						
C 17 State 2H - Wellbore #1 - Plan #1	2,456.59	2,456.25	22.21	5.04	1.294	Level 3, CC, ES
C 17 State 2H - Wellbore #1 - Plan #1	2,500.00	2,499.45	22.60	5.13	1.293	Level 3, SF
C 17 State 3H - Wellbore #1 - Plan #1	1,500.00	1,500.00	50.00	39.68	4.846	CC
C 17 State 3H - Wellbore #1 - Plan #1	1,600.00	1,599.38	50.60	39.59	4.595	ES
C 17 State 3H - Wellbore #1 - Plan #1	1,700.00	1,698.52	52.72	41.02	4.507	SF

Offset Design C 17 State Pad - C 17 State 2H - Wellbore #1 - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													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)	+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	90.00	0.00	25.00	25.00					
100.00	100.00	100.00	100.00	0.14	0.14	90.00	0.00	25.00	25.00	24.72	0.28	89.411		
200.00	200.00	200.00	200.00	0.50	0.50	90.00	0.00	25.00	25.00	24.00	1.00	25.087		
300.00	300.00	300.00	300.00	0.86	0.86	90.00	0.00	25.00	25.00	23.29	1.71	14.590		
400.00	400.00	400.00	400.00	1.22	1.22	90.00	0.00	25.00	25.00	22.57	2.43	10.286		
500.00	500.00	500.00	500.00	1.57	1.57	90.00	0.00	25.00	25.00	21.85	3.15	7.943		
600.00	600.00	600.00	600.00	1.93	1.93	90.00	0.00	25.00	25.00	21.14	3.86	6.469		
700.00	700.00	700.00	700.00	2.29	2.29	90.00	0.00	25.00	25.00	20.42	4.58	5.457		
800.00	800.00	800.00	800.00	2.65	2.65	90.00	0.00	25.00	25.00	19.70	5.30	4.719		
900.00	900.00	900.00	900.00	3.01	3.01	90.00	0.00	25.00	25.00	18.98	6.02	4.156		
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	90.00	0.00	25.00	25.00	18.27	6.73	3.714		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.00	0.00	25.00	25.00	17.55	7.45	3.356		
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.00	0.00	25.00	25.00	16.83	8.17	3.061		
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.00	0.00	25.00	25.00	16.12	8.88	2.814		
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	90.00	0.00	25.00	25.00	15.40	9.60	2.604		
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	90.00	0.00	25.00	25.00	14.68	10.32	2.423		
1,600.00	1,600.00	1,600.00	1,600.00	5.52	5.52	90.00	0.00	25.00	25.00	13.97	11.03	2.266		
1,700.00	1,700.00	1,700.00	1,700.00	5.88	5.88	90.00	0.00	25.00	25.00	13.25	11.75	2.128		
1,800.00	1,800.00	1,800.00	1,800.00	6.23	6.23	90.00	0.00	25.00	25.00	12.53	12.47	2.005		
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	90.00	0.00	25.00	25.00	11.82	13.18	1.896		
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	90.00	0.00	25.00	25.00	11.10	13.90	1.798		

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

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Reference Site: C 17 State Pad

MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Site Error: 0.00 usft

North Reference: Grid

Reference Well: C 17 State 1H

Survey Calculation Method: Minimum Curvature

Well Error: 0.00 usft

Output errors are at 2.00 sigma

Reference Wellbore Wellbore #1

Database: Midland District

Reference Design: Plan #1

Offset TVD Reference: Offset Datum

Offset Design C 17 State Pad - C 17 State 2H - Wellbore #1 - Plan #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+HDGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,100.00	2,100.00	2,100.00	2,100.00	7.31	7.31	90.00		0.00	25.00	25.00	10.38	14.62	1.710	
2,200.00	2,200.00	2,200.00	2,200.00	7.67	7.67	90.00		0.00	25.00	25.00	9.66	15.34	1.630	
2,300.00	2,299.98	2,299.98	2,299.98	8.03	8.03	66.33		0.00	25.00	24.25	8.20	16.05	1.511	
2,400.00	2,399.84	2,399.84	2,399.84	8.38	8.38	78.56		0.00	25.00	22.66	5.90	16.76	1.352 Level 3	
2,456.59	2,456.25	2,456.25	2,456.25	8.58	8.59	90.00		0.00	25.00	22.21	5.04	17.17	1.294 Level 3, CC, ES	
2,500.00	2,499.45	2,499.45	2,499.45	8.74	8.74	100.68		0.00	25.00	22.60	5.13	17.47	1.293 Level 3, SF	
2,600.00	2,598.70	2,598.70	2,598.70	9.10	9.10	126.17		0.00	25.00	27.60	9.47	18.14	1.522	
2,700.00	2,697.54	2,697.54	2,697.54	9.46	9.45	144.56		0.00	25.00	38.61	19.84	18.77	2.057	
2,800.00	2,796.31	2,796.31	2,796.31	9.82	9.81	154.53		0.00	25.00	52.16	32.71	19.45	2.682	
2,900.00	2,895.09	2,895.09	2,895.09	10.19	10.16	160.30		0.00	25.00	66.61	46.47	20.14	3.307	
3,000.00	2,993.86	2,993.86	2,993.86	10.56	10.51	164.00		0.00	25.00	81.49	60.64	20.84	3.910	
3,100.00	3,092.64	3,092.64	3,092.64	10.93	10.87	166.55		0.00	25.00	96.59	75.04	21.55	4.483	
3,200.00	3,191.41	3,191.41	3,191.41	11.31	11.22	168.41		0.00	25.00	111.84	89.58	22.26	5.025	
3,300.00	3,290.19	3,290.19	3,290.19	11.69	11.58	169.82		0.00	25.00	127.17	104.20	22.97	5.537	
3,400.00	3,388.96	3,388.96	3,388.96	12.07	11.93	170.93		0.00	25.00	142.56	118.88	23.68	6.020	
3,500.00	3,487.74	3,487.74	3,487.74	12.45	12.28	171.82		0.00	25.00	157.99	133.60	24.39	6.477	
3,600.00	3,586.51	3,586.51	3,586.51	12.84	12.64	172.55		0.00	25.00	173.46	148.35	25.11	6.909	
3,700.00	3,685.29	3,685.29	3,685.29	13.22	12.99	173.17		0.00	25.00	188.94	163.12	25.82	7.317	
3,800.00	3,784.06	3,784.06	3,784.06	13.61	13.35	173.69		0.00	25.00	204.45	177.91	26.54	7.705	
3,900.00	3,882.84	3,882.84	3,882.84	14.00	13.70	174.13		0.00	25.00	219.96	192.71	27.25	8.072	
4,000.00	3,981.61	3,981.61	3,981.61	14.39	14.05	174.52		0.00	25.00	235.49	207.53	27.97	8.420	
4,100.00	4,080.39	4,080.39	4,080.39	14.79	14.41	174.86		0.00	25.00	251.03	222.35	28.69	8.751	
4,200.00	4,179.16	4,179.16	4,179.16	15.18	14.76	175.16		0.00	25.00	266.58	237.18	29.40	9.067	
4,300.00	4,277.94	4,277.94	4,277.94	15.57	15.12	175.43		0.00	25.00	282.13	252.01	30.12	9.367	
4,400.00	4,376.71	4,376.71	4,376.71	15.97	15.47	175.67		0.00	25.00	297.69	266.85	30.84	9.653	
4,500.00	4,475.49	4,475.49	4,475.49	16.36	15.82	175.88		0.00	25.00	313.26	281.70	31.56	9.927	
4,600.00	4,574.26	4,574.26	4,574.26	16.76	16.18	176.08		0.00	25.00	328.82	296.55	32.28	10.188	
4,700.00	4,673.04	4,673.04	4,673.04	17.16	16.53	176.26		0.00	25.00	344.39	311.40	33.00	10.438	
4,800.00	4,771.81	4,771.81	4,771.81	17.56	16.89	176.42		0.00	25.00	359.97	326.25	33.71	10.677	
4,900.00	4,870.59	4,870.59	4,870.59	17.96	17.24	176.57		0.00	25.00	375.54	341.11	34.43	10.906	
5,000.00	4,969.36	4,969.36	4,969.36	18.35	17.60	176.70		0.00	25.00	391.12	355.97	35.15	11.126	
5,100.00	5,068.14	5,069.34	5,069.33	18.75	17.95	176.71		-0.25	25.80	406.60	370.73	35.87	11.335	
5,200.00	5,166.91	5,169.85	5,169.75	19.16	18.29	176.27		-1.48	29.61	421.69	385.11	36.58	11.527	
5,300.00	5,265.69	5,270.14	5,269.74	19.56	18.63	175.39		-3.75	37.16	436.45	399.16	37.29	11.704	
5,400.00	5,364.46	5,369.97	5,368.94	19.96	18.97	174.12		-7.03	47.80	451.02	413.02	38.00	11.868	
5,500.00	5,463.24	5,468.44	5,466.51	20.36	19.30	172.67		-10.94	60.47	465.67	426.95	38.72	12.028	
5,600.00	5,562.01	5,566.68	5,563.85	20.76	19.64	171.31		-14.86	73.17	480.59	441.16	39.43	12.188	
5,700.00	5,660.79	5,664.92	5,661.19	21.16	19.98	170.02		-18.78	85.67	495.76	455.61	40.15	12.347	
5,800.00	5,759.56	5,763.16	5,758.53	21.57	20.32	168.81		-22.70	98.57	511.17	470.30	40.87	12.506	
5,900.00	5,858.34	5,861.40	5,855.86	21.97	20.67	167.67		-26.62	111.27	526.79	485.19	41.60	12.664	
6,000.00	5,957.12	5,959.64	5,953.20	22.38	21.02	166.60		-30.53	123.97	542.60	500.27	42.33	12.820	
6,100.00	6,055.89	6,057.88	6,050.54	22.78	21.37	165.59		-34.45	136.67	558.59	515.53	43.06	12.974	
6,200.00	6,154.67	6,156.12	6,147.88	23.18	21.72	164.63		-38.37	149.38	574.74	530.95	43.79	13.126	
6,300.00	6,253.44	6,254.36	6,245.21	23.59	22.07	163.73		-42.29	162.08	591.04	546.52	44.52	13.275	
6,400.00	6,352.22	6,352.60	6,342.55	23.99	22.42	162.87		-46.21	174.78	607.48	562.22	45.26	13.423	
6,500.00	6,450.99	6,450.85	6,439.89	24.40	22.78	162.06		-50.13	187.48	624.04	578.04	45.99	13.568	
6,600.00	6,549.77	6,549.09	6,537.22	24.80	23.13	161.29		-54.04	200.18	640.72	593.98	46.73	13.710	
6,700.00	6,648.54	6,647.33	6,634.56	25.21	23.49	160.56		-57.96	212.88	657.50	610.03	47.47	13.850	
6,800.00	6,747.32	6,745.57	6,731.90	25.62	23.85	159.86		-61.88	225.58	674.39	626.17	48.22	13.987	
6,900.00	6,846.09	6,843.81	6,829.24	26.02	24.21	159.20		-65.80	238.28	691.36	642.40	48.96	14.121	

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

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Reference Site: C 17 State Pad

MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Site Error: 0.00 usft

North Reference: Grid

Reference Well: C 17 State 1H

Survey Calculation Method: Minimum Curvature

Well Error: 0.00 usft

Output errors are at 2.00 sigma

Reference Wellbore Wellbore #1

Database: Midland District

Reference Design: Plan #1

Offset TVD Reference: Offset Datum

Offset Design C 17 State Pad - C 17 State 2H - Wellbore #1 - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,000.00	6,944.87	6,942.05	6,926.57	26.43	24.57	158.57	-69.72	250.98	708.43	658.72	49.70	14.253	
7,100.00	7,043.64	7,040.29	7,023.91	26.83	24.94	157.98	-73.64	263.69	725.57	675.12	50.45	14.382	
7,200.00	7,142.42	7,138.53	7,121.25	27.24	25.30	157.40	-77.56	276.39	742.79	691.59	51.20	14.508	
7,300.00	7,241.19	7,236.77	7,218.59	27.65	25.66	156.86	-81.47	289.09	760.07	708.13	51.94	14.632	
7,400.00	7,339.97	7,335.01	7,315.92	28.05	26.03	156.34	-85.39	301.79	777.42	724.73	52.69	14.754	
7,500.00	7,438.74	7,433.25	7,413.26	28.46	26.40	155.84	-89.31	314.49	794.83	741.39	53.44	14.872	
7,600.00	7,537.52	7,531.49	7,510.60	28.87	26.77	155.36	-93.23	327.19	812.30	758.10	54.19	14.989	
7,700.00	7,636.29	7,629.73	7,607.93	29.28	27.13	154.90	-97.15	339.89	829.81	774.87	54.95	15.102	
7,800.00	7,735.07	7,727.97	7,705.27	29.68	27.50	154.46	-101.07	352.59	847.38	791.68	55.70	15.214	
7,900.00	7,833.84	7,826.21	7,802.61	30.09	27.87	154.04	-104.98	365.29	865.00	808.54	56.45	15.323	
8,000.00	7,932.62	7,924.45	7,899.95	30.50	28.24	153.64	-108.90	378.00	882.65	825.45	57.21	15.429	
8,100.00	8,031.42	8,022.72	7,997.30	30.91	28.62	153.29	-112.82	390.70	900.21	842.20	58.01	15.519	
8,200.00	8,130.59	8,124.50	8,098.18	31.30	29.00	152.97	-116.82	403.66	915.42	856.53	58.88	15.546	
8,300.00	8,230.14	8,233.91	8,206.99	31.68	29.41	152.69	-120.18	414.55	926.75	867.03	59.73	15.517	
8,400.00	8,329.97	8,344.16	8,316.99	32.04	29.81	152.51	-122.32	421.50	933.90	873.41	60.50	15.437	
8,500.00	8,429.93	8,454.87	8,427.65	32.38	30.19	152.43	-123.22	424.41	936.83	875.63	61.20	15.307	
8,600.00	8,529.65	8,557.27	8,529.80	32.68	30.53	-90.10	-123.27	419.06	936.91	875.06	61.85	15.149	
8,700.00	8,626.89	8,657.49	8,627.37	32.95	30.83	-90.13	-123.34	396.69	936.93	874.50	62.43	15.008	
8,800.00	8,718.70	8,757.80	8,719.63	33.17	31.11	-90.15	-123.47	357.65	936.95	873.98	62.97	14.879	
8,900.00	8,802.28	8,858.18	8,803.73	33.34	31.39	-90.17	-123.65	303.09	936.99	873.48	63.51	14.754	
9,000.00	8,875.09	8,958.62	8,877.08	33.46	31.70	-90.19	-123.88	234.65	937.03	872.91	64.12	14.615	
9,100.00	8,934.94	9,059.11	8,937.39	33.56	32.11	-90.20	-124.14	154.44	937.08	872.18	64.90	14.440	
9,200.00	8,979.98	9,159.63	8,982.79	33.69	32.66	-90.20	-124.44	64.90	937.13	871.18	65.95	14.209	
9,300.00	9,008.87	9,260.17	9,011.87	34.06	33.40	-90.19	-124.76	-31.20	937.19	869.83	67.37	13.912	
9,400.00	9,020.71	9,360.70	9,023.73	34.82	34.32	-90.19	-125.09	-130.90	937.26	868.12	69.14	13.557	
9,500.00	9,021.00	9,460.80	9,024.00	35.83	35.43	-90.18	-125.42	-230.99	937.32	866.05	71.27	13.152	
9,600.00	9,021.00	9,560.80	9,024.00	37.05	36.70	-90.18	-125.75	-330.99	937.38	863.63	73.75	12.710	
9,700.00	9,021.00	9,660.80	9,024.00	38.44	38.15	-90.18	-126.08	-430.99	937.44	860.86	76.58	12.241	
9,800.00	9,021.00	9,760.80	9,024.00	39.99	39.75	-90.18	-126.42	-530.99	937.50	857.79	79.72	11.760	
9,900.00	9,021.00	9,860.80	9,024.00	41.67	41.48	-90.18	-126.75	-630.99	937.56	854.44	83.13	11.279	
10,000.00	9,021.00	9,960.80	9,024.00	43.47	43.33	-90.18	-127.08	-730.99	937.63	850.85	86.77	10.805	
10,100.00	9,021.00	10,060.80	9,024.00	45.38	45.28	-90.18	-127.41	-830.99	937.69	847.05	90.63	10.346	
10,200.00	9,021.00	10,160.80	9,024.00	47.39	47.33	-90.18	-127.74	-930.99	937.75	843.07	94.68	9.905	
10,300.00	9,021.00	10,260.80	9,024.00	49.47	49.45	-90.18	-128.07	-1,030.99	937.81	838.93	98.89	9.484	
10,400.00	9,021.00	10,360.80	9,024.00	51.63	51.65	-90.18	-128.40	-1,130.99	937.87	834.64	103.24	9.085	
10,500.00	9,021.00	10,460.80	9,024.00	53.85	53.90	-90.18	-128.74	-1,230.99	937.93	830.22	107.71	8.708	
10,600.00	9,021.00	10,560.80	9,024.00	56.13	56.21	-90.18	-129.07	-1,330.99	938.00	825.70	112.30	8.353	
10,700.00	9,021.00	10,660.80	9,024.00	58.46	58.57	-90.18	-129.40	-1,430.99	938.06	821.07	116.98	8.019	
10,800.00	9,021.00	10,760.80	9,024.00	60.83	60.97	-90.18	-129.73	-1,530.99	938.12	816.37	121.75	7.705	
10,900.00	9,021.00	10,860.80	9,024.00	63.24	63.40	-90.18	-130.06	-1,630.98	938.18	811.58	126.60	7.411	
11,000.00	9,021.00	10,960.80	9,024.00	65.69	65.87	-90.18	-130.39	-1,730.98	938.24	806.73	131.52	7.134	
11,100.00	9,021.00	11,060.80	9,024.00	68.16	68.37	-90.18	-130.72	-1,830.98	938.31	801.81	136.49	6.874	
11,200.00	9,021.00	11,160.80	9,024.00	70.67	70.89	-90.18	-131.05	-1,930.98	938.37	796.85	141.52	6.631	
11,300.00	9,021.00	11,260.80	9,024.00	73.20	73.44	-90.18	-131.39	-2,030.98	938.43	791.83	146.60	6.401	
11,400.00	9,021.00	11,360.80	9,024.00	75.75	76.01	-90.18	-131.72	-2,130.98	938.49	786.77	151.72	6.186	
11,500.00	9,021.00	11,460.80	9,024.00	78.32	78.60	-90.18	-132.05	-2,230.98	938.55	781.67	156.88	5.982	
11,600.00	9,021.00	11,560.80	9,024.00	80.91	81.21	-90.18	-132.38	-2,330.98	938.61	776.53	162.08	5.791	
11,700.00	9,021.00	11,660.80	9,024.00	83.52	83.83	-90.18	-132.71	-2,430.98	938.68	771.37	167.31	5.610	
11,800.00	9,021.00	11,760.80	9,024.00	86.15	86.46	-90.18	-133.04	-2,530.98	938.74	766.17	172.57	5.440	
11,900.00	9,021.00	11,860.80	9,024.00	88.78	89.11	-90.18	-133.37	-2,630.98	938.80	760.94	177.86	5.278	
12,000.00	9,021.00	11,960.80	9,024.00	91.43	91.77	-90.18	-133.71	-2,730.98	938.86	755.69	183.17	5.126	

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

Scientific Drilling Int.

Anticollision Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well C 17 State 1H
Project:	Eddy County, New Mexico NAD 83	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Reference Site:	C 17 State Pad	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Midland District
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design C 17 State Pad - C 17 State 2H - Wellbore #1 - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												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	
12,100.00	9,021.00	12,060.80	9,024.00	94.09	94.45	-90.18	-134.04	-2,830.98	938.92	750.42	188.50	4.981	
12,200.00	9,021.00	12,160.80	9,024.00	96.76	97.13	-90.18	-134.37	-2,930.98	938.99	745.13	193.85	4.844	
12,300.00	9,021.00	12,260.80	9,024.00	99.44	99.82	-90.18	-134.70	-3,030.98	939.05	739.82	199.23	4.713	
12,400.00	9,021.00	12,360.80	9,024.00	102.13	102.52	-90.18	-135.03	-3,130.98	939.11	734.49	204.62	4.590	
12,500.00	9,021.00	12,460.80	9,024.00	104.83	105.23	-90.18	-135.36	-3,230.98	939.17	729.15	210.02	4.472	
12,600.00	9,021.00	12,560.80	9,024.00	107.54	107.94	-90.18	-135.69	-3,330.97	939.23	723.79	215.44	4.360	
12,700.00	9,021.00	12,660.80	9,024.00	110.25	110.66	-90.18	-136.02	-3,430.97	939.29	718.42	220.88	4.253	
12,800.00	9,021.00	12,760.80	9,024.00	112.97	113.39	-90.18	-136.36	-3,530.97	939.36	713.03	226.33	4.150	
12,900.00	9,021.00	12,860.80	9,024.00	115.70	116.12	-90.18	-136.69	-3,630.97	939.42	707.63	231.79	4.053	
13,000.00	9,021.00	12,960.80	9,024.00	118.43	118.86	-90.18	-137.02	-3,730.97	939.48	702.22	237.26	3.960	
13,100.00	9,021.00	13,060.80	9,024.00	121.17	121.60	-90.18	-137.35	-3,830.97	939.54	696.80	242.74	3.871	
13,200.00	9,021.00	13,160.80	9,024.00	123.91	124.35	-90.18	-137.68	-3,930.97	939.60	691.38	248.23	3.785	
13,300.00	9,021.00	13,260.80	9,024.00	126.65	127.10	-90.18	-138.01	-4,030.97	939.67	685.94	253.73	3.703	
13,400.00	9,021.00	13,360.80	9,024.00	129.40	129.86	-90.18	-138.34	-4,130.97	939.73	680.49	259.24	3.625	
13,500.00	9,021.00	13,460.80	9,024.00	132.16	132.62	-90.18	-138.68	-4,230.97	939.79	675.04	264.75	3.550	
13,600.00	9,021.00	13,560.80	9,024.00	134.92	135.38	-90.18	-139.01	-4,330.97	939.85	669.58	270.28	3.477	
13,700.00	9,021.00	13,660.80	9,024.00	137.68	138.15	-90.18	-139.34	-4,430.97	939.91	664.11	275.81	3.408	
13,800.00	9,021.00	13,760.80	9,024.00	140.45	140.92	-90.18	-139.67	-4,530.97	939.97	658.63	281.34	3.341	
13,835.22	9,021.00	13,796.01	9,024.00	141.42	141.90	-90.18	-139.79	-4,566.19	940.00	656.70	283.29	3.318	

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Reference Site: C 17 State Pad

MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Site Error: 0.00 usft

North Reference: Grid

Reference Well: C 17 State 1H

Survey Calculation Method: Minimum Curvature

Well Error: 0.00 usft

Output errors are at 2.00 sigma

Reference Wellbore Wellbore #1

Database: Midland District

Reference Design: Plan #1

Offset TVD Reference: Offset Datum

Offset Design C 17 State Pad - C 17 State 3H - Wellbore #1 - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												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	
0.00	0.00	0.00	0.00	0.00	0.00	89.89	0.10	50.00	50.00				
100.00	100.00	100.00	100.00	0.14	0.14	89.89	0.10	50.00	50.00	49.72	0.28	178.822	
200.00	200.00	200.00	200.00	0.50	0.50	89.89	0.10	50.00	50.00	49.00	1.00	50.173	
300.00	300.00	300.00	300.00	0.86	0.86	89.89	0.10	50.00	50.00	48.29	1.71	29.180	
400.00	400.00	400.00	400.00	1.22	1.22	89.89	0.10	50.00	50.00	47.57	2.43	20.572	
500.00	500.00	500.00	500.00	1.57	1.57	89.89	0.10	50.00	50.00	46.85	3.15	15.886	
600.00	600.00	600.00	600.00	1.93	1.93	89.89	0.10	50.00	50.00	46.14	3.86	12.939	
700.00	700.00	700.00	700.00	2.29	2.29	89.89	0.10	50.00	50.00	45.42	4.58	10.914	
800.00	800.00	800.00	800.00	2.65	2.65	89.89	0.10	50.00	50.00	44.70	5.30	9.437	
900.00	900.00	900.00	900.00	3.01	3.01	89.89	0.10	50.00	50.00	43.98	6.02	8.312	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	89.89	0.10	50.00	50.00	43.27	6.73	7.427	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	89.89	0.10	50.00	50.00	42.55	7.45	6.712	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	89.89	0.10	50.00	50.00	41.83	8.17	6.123	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	89.89	0.10	50.00	50.00	41.12	8.88	5.629	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	89.89	0.10	50.00	50.00	40.40	9.60	5.208	
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	89.89	0.10	50.00	50.00	39.68	10.32	4.846 CC	
1,600.00	1,600.00	1,599.38	1,599.38	5.52	5.50	91.73	-1.52	50.58	50.60	39.59	11.01	4.595 ES	
1,700.00	1,700.00	1,698.52	1,698.37	5.88	5.82	96.95	-6.38	52.30	52.72	41.02	11.70	4.507 SF	
1,800.00	1,800.00	1,797.19	1,796.66	6.23	6.15	104.64	-14.41	55.16	57.11	44.73	12.38	4.613	
1,900.00	1,900.00	1,895.16	1,893.91	6.59	6.48	113.36	-25.54	59.12	64.69	51.62	13.07	4.950	
2,000.00	2,000.00	1,992.21	1,989.79	6.95	6.81	121.72	-39.64	64.14	76.09	62.33	13.76	5.530	
2,100.00	2,100.00	2,090.62	2,086.73	7.31	7.16	128.54	-55.62	69.83	90.25	75.79	14.46	6.241	
2,200.00	2,200.00	2,189.12	2,183.76	7.67	7.52	133.48	-71.63	75.52	105.34	90.18	15.17	6.946	
2,300.00	2,299.98	2,287.40	2,280.56	8.03	7.88	110.29	-87.59	81.20	121.60	105.77	15.83	7.681	
2,400.00	2,399.84	2,385.15	2,376.84	8.38	8.25	114.66	-103.47	86.85	139.83	123.32	16.51	8.468	
2,500.00	2,499.45	2,482.24	2,472.49	8.74	8.62	119.00	-119.24	92.46	160.41	143.23	17.18	9.337	
2,600.00	2,598.70	2,578.57	2,567.37	9.10	9.00	123.14	-134.89	98.03	183.67	165.84	17.83	10.300	
2,700.00	2,697.54	2,674.14	2,661.51	9.46	9.37	127.12	-150.42	103.55	209.56	191.07	18.48	11.337	
2,800.00	2,796.31	2,769.60	2,755.54	9.82	9.74	130.47	-165.92	109.07	236.53	217.38	19.16	12.346	
2,900.00	2,895.09	2,865.06	2,849.57	10.19	10.12	133.14	-181.43	114.58	264.12	244.28	19.84	13.313	
3,000.00	2,993.86	2,960.51	2,943.59	10.56	10.50	135.30	-196.94	120.10	292.14	271.61	20.53	14.233	
3,100.00	3,092.64	3,055.97	3,037.62	10.93	10.89	137.09	-212.45	125.62	320.48	299.26	21.22	15.105	
3,200.00	3,191.41	3,151.43	3,131.65	11.31	11.27	138.59	-227.95	131.13	349.06	327.15	21.91	15.931	
3,300.00	3,290.19	3,246.89	3,225.68	11.69	11.66	139.86	-243.46	136.65	377.83	355.22	22.61	16.711	
3,400.00	3,388.96	3,342.35	3,319.71	12.07	12.05	140.95	-258.97	142.17	406.75	383.44	23.31	17.449	
3,500.00	3,487.74	3,437.80	3,413.74	12.45	12.44	141.90	-274.47	147.69	435.78	411.77	24.01	18.147	
3,600.00	3,586.51	3,533.26	3,507.76	12.84	12.84	142.73	-289.98	153.20	464.92	440.20	24.72	18.807	
3,700.00	3,685.29	3,628.72	3,601.79	13.22	13.23	143.46	-305.49	158.72	494.13	468.70	25.43	19.432	
3,800.00	3,784.06	3,724.18	3,695.82	13.61	13.63	144.11	-321.00	164.24	523.40	497.27	26.14	20.025	
3,900.00	3,882.84	3,819.64	3,789.85	14.00	14.02	144.70	-336.50	169.75	552.74	525.89	26.85	20.587	
4,000.00	3,981.61	3,915.10	3,883.88	14.39	14.42	145.22	-352.01	175.27	582.12	554.55	27.56	21.120	
4,100.00	4,080.39	4,010.55	3,977.91	14.79	14.82	145.69	-367.52	180.79	611.53	583.26	28.28	21.627	
4,200.00	4,179.16	4,106.01	4,071.94	15.18	15.22	146.12	-383.02	186.30	640.99	612.00	28.99	22.109	
4,300.00	4,277.94	4,201.47	4,165.96	15.57	15.62	146.52	-398.53	191.82	670.47	640.76	29.71	22.568	
4,400.00	4,376.71	4,296.93	4,259.99	15.97	16.02	146.87	-414.04	197.34	699.98	669.56	30.43	23.006	
4,500.00	4,475.49	4,392.39	4,354.02	16.36	16.42	147.20	-429.55	202.86	729.52	698.37	31.14	23.423	
4,600.00	4,574.26	4,487.85	4,448.05	16.76	16.82	147.51	-445.05	208.37	759.07	727.21	31.86	23.822	
4,700.00	4,673.04	4,583.30	4,542.08	17.16	17.23	147.79	-460.56	213.89	788.64	756.06	32.59	24.203	
4,800.00	4,771.81	4,678.76	4,636.11	17.56	17.63	148.05	-476.07	219.41	818.23	784.92	33.31	24.567	
4,900.00	4,870.59	4,774.22	4,730.14	17.96	18.03	148.30	-491.57	224.92	847.83	813.80	34.03	24.916	
5,000.00	4,969.36	4,869.68	4,824.16	18.35	18.44	148.52	-507.08	230.44	877.45	842.70	34.75	25.250	

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

Scientific Drilling Int.

Anticollision Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well C 17 State 1H
Project:	Eddy County, New Mexico NAD 83	TVD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Reference Site:	C 17 State Pad	MD Reference:	GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	C 17 State 1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Midland District
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design C 17 State Pad - C 17 State 3H - Wellbore #1 - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													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		
5,100.00	5,068.14	4,965.14	4,918.19	18.75	18.84	148.73	-522.59	235.96	907.08	871.60	35.47	25.570		
5,200.00	5,166.91	5,060.59	5,012.22	19.16	19.25	148.93	-538.10	241.47	936.71	900.52	36.20	25.877		
5,300.00	5,265.69	5,156.05	5,106.25	19.56	19.65	149.12	-553.60	246.99	966.36	929.44	36.92	26.172		
5,400.00	5,364.46	5,251.51	5,200.28	19.96	20.06	149.29	-569.11	252.51	996.02	958.37	37.65	26.456		
5,500.00	5,463.24	5,346.97	5,294.31	20.36	20.46	149.46	-584.62	258.03	1,025.68	987.31	38.37	26.729		
5,600.00	5,562.01	5,442.43	5,388.34	20.76	20.87	149.62	-600.12	263.54	1,055.35	1,016.25	39.10	26.991		
5,700.00	5,660.79	5,537.89	5,482.36	21.16	21.28	149.76	-615.63	269.06	1,085.03	1,045.21	39.83	27.244		
5,800.00	5,759.56	5,633.34	5,576.39	21.57	21.68	149.90	-631.14	274.58	1,114.72	1,074.16	40.55	27.488		
5,900.00	5,858.34	5,728.80	5,670.42	21.97	22.09	150.03	-646.65	280.09	1,144.41	1,103.13	41.28	27.722		
6,000.00	5,957.12	5,824.26	5,764.45	22.38	22.50	150.16	-662.15	285.61	1,174.10	1,132.10	42.01	27.949		
6,100.00	6,055.89	5,919.72	5,858.48	22.78	22.91	150.28	-677.66	291.13	1,203.80	1,161.07	42.74	28.168		
6,200.00	6,154.67	6,015.18	5,952.51	23.18	23.31	150.39	-693.17	296.64	1,233.51	1,190.04	43.47	28.379		
6,300.00	6,253.44	6,110.63	6,046.53	23.59	23.72	150.50	-708.67	302.16	1,263.22	1,219.02	44.19	28.583		
6,400.00	6,352.22	6,206.09	6,140.56	23.99	24.13	150.61	-724.18	307.68	1,292.93	1,248.01	44.92	28.780		
6,500.00	6,450.99	6,301.55	6,234.59	24.40	24.54	150.70	-739.69	313.19	1,322.65	1,277.00	45.65	28.971		
6,600.00	6,549.77	6,397.01	6,328.62	24.80	24.95	150.80	-755.20	318.71	1,352.37	1,305.99	46.38	29.156		
6,700.00	6,648.54	6,492.47	6,422.65	25.21	25.36	150.89	-770.70	324.23	1,382.09	1,334.98	47.11	29.335		
6,800.00	6,747.32	6,587.93	6,516.68	25.62	25.77	150.97	-786.21	329.75	1,411.82	1,363.98	47.84	29.508		
6,900.00	6,846.09	6,683.38	6,610.71	26.02	26.18	151.06	-801.72	335.26	1,441.55	1,392.97	48.58	29.676		
7,000.00	6,944.87	6,778.84	6,704.73	26.43	26.59	151.14	-817.22	340.78	1,471.28	1,421.97	49.31	29.839		
7,100.00	7,043.64	6,874.30	6,798.76	26.83	27.00	151.21	-832.73	346.30	1,501.02	1,450.98	50.04	29.997		
7,200.00	7,142.42	6,969.76	6,892.79	27.24	27.41	151.29	-848.24	351.81	1,530.75	1,479.98	50.77	30.151		
7,300.00	7,241.19	7,065.22	6,986.82	27.65	27.82	151.36	-863.75	357.33	1,560.49	1,508.99	51.50	30.299		
7,400.00	7,339.97	7,160.68	7,080.85	28.05	28.23	151.43	-879.25	362.85	1,590.23	1,538.00	52.23	30.444		
7,500.00	7,438.74	7,256.13	7,174.88	28.46	28.64	151.49	-894.76	368.36	1,619.98	1,567.01	52.97	30.585		
7,600.00	7,537.52	7,351.59	7,268.91	28.87	29.05	151.55	-910.27	373.88	1,649.72	1,596.02	53.70	30.721		
7,700.00	7,636.29	7,447.05	7,362.93	29.28	29.46	151.62	-925.77	379.40	1,679.47	1,625.04	54.43	30.854		
7,800.00	7,735.07	7,542.51	7,456.96	29.68	29.87	151.67	-941.28	384.92	1,709.22	1,654.05	55.17	30.983		
7,900.00	7,833.84	7,637.97	7,550.99	30.09	30.28	151.73	-956.79	390.43	1,738.97	1,683.07	55.90	31.109		
8,000.00	7,932.62	7,733.42	7,645.02	30.50	30.69	151.79	-972.30	395.95	1,768.72	1,712.09	56.63	31.231		
8,100.00	8,031.42	7,828.93	7,739.09	30.91	31.10	151.93	-987.81	401.47	1,798.33	1,740.89	57.44	31.307		
8,200.00	8,130.59	7,925.10	7,833.83	31.30	31.51	152.20	-1,003.43	407.03	1,825.70	1,767.32	58.39	31.270		
8,300.00	8,230.14	8,022.07	7,929.34	31.68	31.93	152.39	-1,019.19	412.63	1,850.09	1,790.81	59.28	31.211		
8,400.00	8,329.97	8,229.46	8,134.47	32.04	32.28	152.42	-1,047.71	422.78	1,869.46	1,808.94	60.52	30.892		
8,500.00	8,429.93	8,489.74	8,394.10	32.38	33.72	152.41	-1,063.80	428.50	1,877.76	1,815.91	61.85	30.360		
8,600.00	8,529.65	8,625.91	8,530.02	32.68	34.12	-90.10	-1,064.37	423.37	1,878.02	1,815.41	62.61	29.997		
8,700.00	8,626.89	8,726.43	8,627.90	32.95	34.38	-90.12	-1,064.44	401.04	1,878.03	1,814.86	63.17	29.732		
8,800.00	8,718.70	8,827.05	8,720.47	33.17	34.60	-90.14	-1,064.56	361.93	1,878.05	1,814.37	63.67	29.495		
8,900.00	8,802.28	8,927.75	8,804.84	33.34	34.77	-90.14	-1,064.73	307.20	1,878.07	1,813.90	64.16	29.269		
9,000.00	8,875.09	9,028.50	8,878.38	33.46	34.89	-90.15	-1,064.94	238.52	1,878.10	1,813.38	64.72	29.020		
9,100.00	8,934.94	9,129.29	8,938.79	33.56	34.97	-90.15	-1,065.19	158.00	1,878.13	1,812.69	65.44	28.702		
9,200.00	8,979.98	9,230.09	8,984.17	33.69	35.01	-90.15	-1,065.46	68.15	1,878.16	1,811.73	66.43	28.272		
9,300.00	9,008.87	9,330.87	9,013.13	34.06	35.03	-90.14	-1,065.76	-28.25	1,878.20	1,810.42	67.78	27.708		
9,400.00	9,020.71	9,431.61	9,024.77	34.82	35.07	-90.12	-1,066.07	-128.18	1,878.24	1,808.74	69.50	27.024		
9,500.00	9,021.00	9,531.73	9,025.00	35.83	35.75	-90.12	-1,066.38	-228.29	1,878.28	1,806.69	71.58	26.239		
9,600.00	9,021.00	9,631.73	9,025.00	37.05	36.99	-90.12	-1,066.69	-328.29	1,878.32	1,804.29	74.02	25.374		
9,700.00	9,021.00	9,731.73	9,025.00	38.44	38.40	-90.12	-1,067.00	-428.29	1,878.36	1,801.55	76.81	24.455		
9,800.00	9,021.00	9,831.73	9,025.00	39.99	39.97	-90.12	-1,067.31	-528.29	1,878.40	1,798.49	79.91	23.508		
9,900.00	9,021.00	9,931.73	9,025.00	41.67	41.68	-90.12	-1,067.62	-628.29	1,878.44	1,795.16	83.28	22.557		
10,000.00	9,021.00	10,031.73	9,025.00	43.47	43.50	-90.12	-1,067.93	-728.29	1,878.48	1,791.59	86.89	21.619		

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

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)

Reference Site: C 17 State Pad

Site Error: 0.00 usft
Reference Well: C 17 State 1H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1

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 C 17 State Pad - C 17 State 3H - Wellbore #1 - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM												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)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,100.00	9,021.00	10,131.73	9,025.00	45.38	45.43	-90.12	-1,068.23	-828.29	1,878.52	1,787.80	90.72	20.707	
10,200.00	9,021.00	10,231.73	9,025.00	47.39	47.45	-90.12	-1,068.54	-928.29	1,878.55	1,783.82	94.73	19.830	
10,300.00	9,021.00	10,331.73	9,025.00	49.47	49.55	-90.12	-1,068.85	-1,028.29	1,878.59	1,779.68	98.91	18.992	
10,400.00	9,021.00	10,431.73	9,025.00	51.63	51.73	-90.12	-1,069.16	-1,128.29	1,878.63	1,775.40	103.24	18.197	
10,500.00	9,021.00	10,531.73	9,025.00	53.85	53.96	-90.12	-1,069.47	-1,228.29	1,878.67	1,770.98	107.69	17.445	
10,600.00	9,021.00	10,631.73	9,025.00	56.13	56.25	-90.12	-1,069.78	-1,328.29	1,878.71	1,766.46	112.26	16.736	
10,700.00	9,021.00	10,731.73	9,025.00	58.46	58.59	-90.12	-1,070.09	-1,428.29	1,878.75	1,761.83	116.92	16.069	
10,800.00	9,021.00	10,831.73	9,025.00	60.83	60.97	-90.12	-1,070.40	-1,528.29	1,878.79	1,757.12	121.67	15.441	
10,900.00	9,021.00	10,931.73	9,025.00	63.24	63.39	-90.12	-1,070.71	-1,628.29	1,878.83	1,752.33	126.50	14.852	
11,000.00	9,021.00	11,031.73	9,025.00	65.69	65.84	-90.12	-1,071.02	-1,728.29	1,878.87	1,747.47	131.40	14.299	
11,100.00	9,021.00	11,131.73	9,025.00	68.16	68.32	-90.12	-1,071.32	-1,828.29	1,878.91	1,742.55	136.36	13.779	
11,200.00	9,021.00	11,231.73	9,025.00	70.67	70.84	-90.12	-1,071.63	-1,928.29	1,878.95	1,737.57	141.38	13.290	
11,300.00	9,021.00	11,331.73	9,025.00	73.20	73.37	-90.12	-1,071.94	-2,028.29	1,878.99	1,732.54	146.45	12.830	
11,400.00	9,021.00	11,431.73	9,025.00	75.75	75.93	-90.12	-1,072.25	-2,128.29	1,879.03	1,727.47	151.56	12.398	
11,500.00	9,021.00	11,531.73	9,025.00	78.32	78.51	-90.12	-1,072.56	-2,228.28	1,879.07	1,722.36	156.71	11.991	
11,600.00	9,021.00	11,631.73	9,025.00	80.91	81.10	-90.12	-1,072.87	-2,328.28	1,879.11	1,717.21	161.90	11.607	
11,700.00	9,021.00	11,731.73	9,025.00	83.52	83.71	-90.12	-1,073.18	-2,428.28	1,879.15	1,712.03	167.12	11.244	
11,800.00	9,021.00	11,831.73	9,025.00	86.15	86.34	-90.12	-1,073.49	-2,528.28	1,879.19	1,706.82	172.37	10.902	
11,900.00	9,021.00	11,931.73	9,025.00	88.78	88.98	-90.12	-1,073.80	-2,628.28	1,879.23	1,701.58	177.65	10.578	
12,000.00	9,021.00	12,031.73	9,025.00	91.43	91.63	-90.12	-1,074.11	-2,728.28	1,879.27	1,696.31	182.95	10.272	
12,100.00	9,021.00	12,131.73	9,025.00	94.09	94.29	-90.12	-1,074.41	-2,828.28	1,879.30	1,691.03	188.28	9.982	
12,200.00	9,021.00	12,231.73	9,025.00	96.76	96.97	-90.12	-1,074.72	-2,928.28	1,879.34	1,685.72	193.62	9.706	
12,300.00	9,021.00	12,331.73	9,025.00	99.44	99.65	-90.12	-1,075.03	-3,028.28	1,879.38	1,680.39	198.99	9.445	
12,400.00	9,021.00	12,431.73	9,025.00	102.13	102.35	-90.12	-1,075.34	-3,128.28	1,879.42	1,675.05	204.38	9.196	
12,500.00	9,021.00	12,531.73	9,025.00	104.83	105.05	-90.12	-1,075.65	-3,228.28	1,879.46	1,669.69	209.78	8.959	
12,600.00	9,021.00	12,631.73	9,025.00	107.54	107.75	-90.12	-1,075.96	-3,328.28	1,879.50	1,664.31	215.19	8.734	
12,700.00	9,021.00	12,731.73	9,025.00	110.25	110.47	-90.12	-1,076.27	-3,428.28	1,879.54	1,658.92	220.62	8.519	
12,800.00	9,021.00	12,831.73	9,025.00	112.97	113.19	-90.12	-1,076.58	-3,528.28	1,879.58	1,653.52	226.06	8.314	
12,900.00	9,021.00	12,931.73	9,025.00	115.70	115.92	-90.12	-1,076.89	-3,628.28	1,879.62	1,648.10	231.52	8.119	
13,000.00	9,021.00	13,031.73	9,025.00	118.43	118.65	-90.12	-1,077.20	-3,728.28	1,879.66	1,642.67	236.99	7.932	
13,100.00	9,021.00	13,131.73	9,025.00	121.17	121.39	-90.12	-1,077.50	-3,828.28	1,879.70	1,637.24	242.46	7.753	
13,200.00	9,021.00	13,231.73	9,025.00	123.91	124.13	-90.12	-1,077.81	-3,928.28	1,879.74	1,631.79	247.95	7.581	
13,300.00	9,021.00	13,331.73	9,025.00	126.65	126.88	-90.12	-1,078.12	-4,028.28	1,879.78	1,626.33	253.45	7.417	
13,400.00	9,021.00	13,431.73	9,025.00	129.40	129.63	-90.12	-1,078.43	-4,128.28	1,879.82	1,620.87	258.95	7.259	
13,500.00	9,021.00	13,531.73	9,025.00	132.16	132.39	-90.12	-1,078.74	-4,228.27	1,879.86	1,615.39	264.46	7.108	
13,600.00	9,021.00	13,631.73	9,025.00	134.92	135.15	-90.12	-1,079.05	-4,328.27	1,879.90	1,609.91	269.98	6.963	
13,700.00	9,021.00	13,731.73	9,025.00	137.68	137.91	-90.12	-1,079.36	-4,428.27	1,879.94	1,604.43	275.51	6.823	
13,800.00	9,021.00	13,831.73	9,025.00	140.45	140.68	-90.12	-1,079.67	-4,528.27	1,879.98	1,598.93	281.04	6.689	
13,835.22	9,021.00	13,866.94	9,025.00	141.42	141.66	-90.12	-1,079.78	-4,563.49	1,879.99	1,597.00	282.99	6.643	

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Reference Site: C 17 State Pad

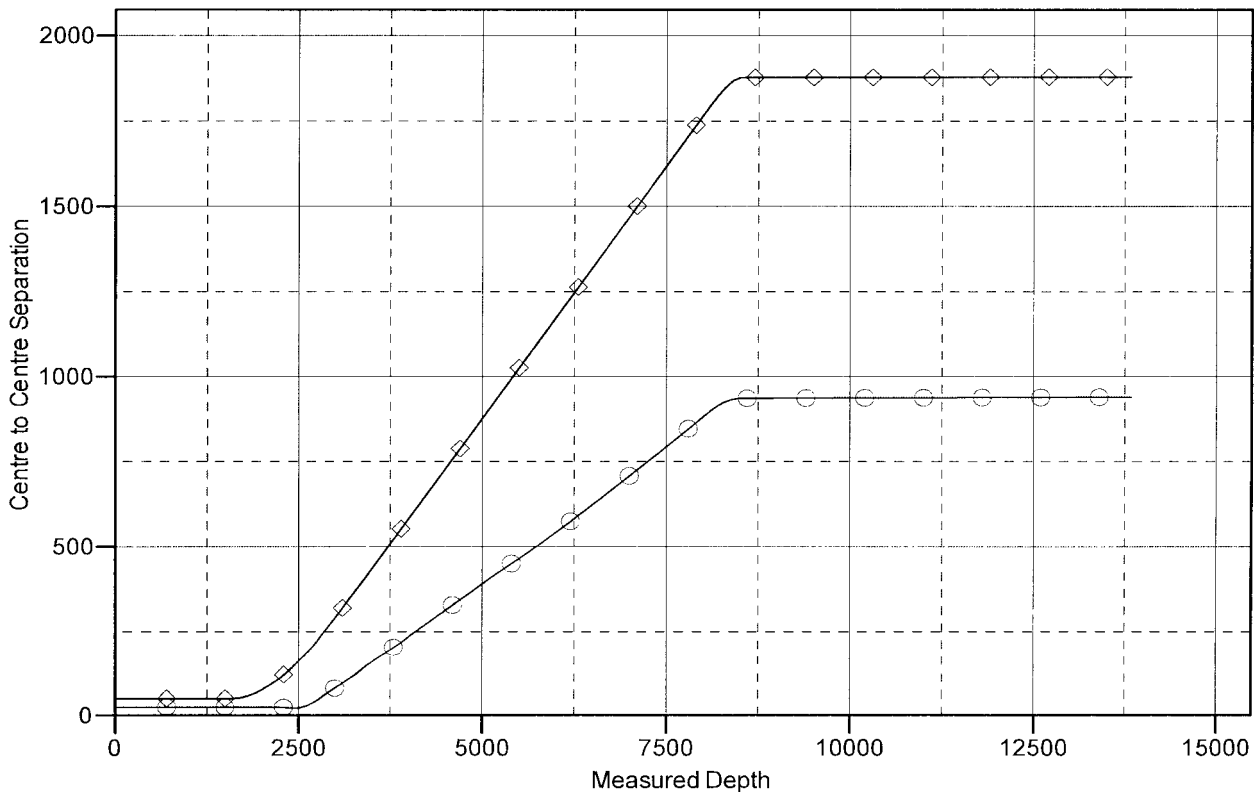
Site Error: 0.00 usft
Reference Well: C 17 State 1H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
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 3154 + KB 22 = @ 3176.00usft (O
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: C 17 State 1H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.07°

Ladder Plot



LEGEND

○ C 17 State 2H, Wellbore #1, Plan #1 V0 ◇ C 17 State 3H, Wellbore #1, Plan #1 V0

Scientific Drilling Int.

Anticollision Report

Company: WPX Energy
Project: Eddy County, New Mexico NAD 83

Reference Site: C 17 State Pad

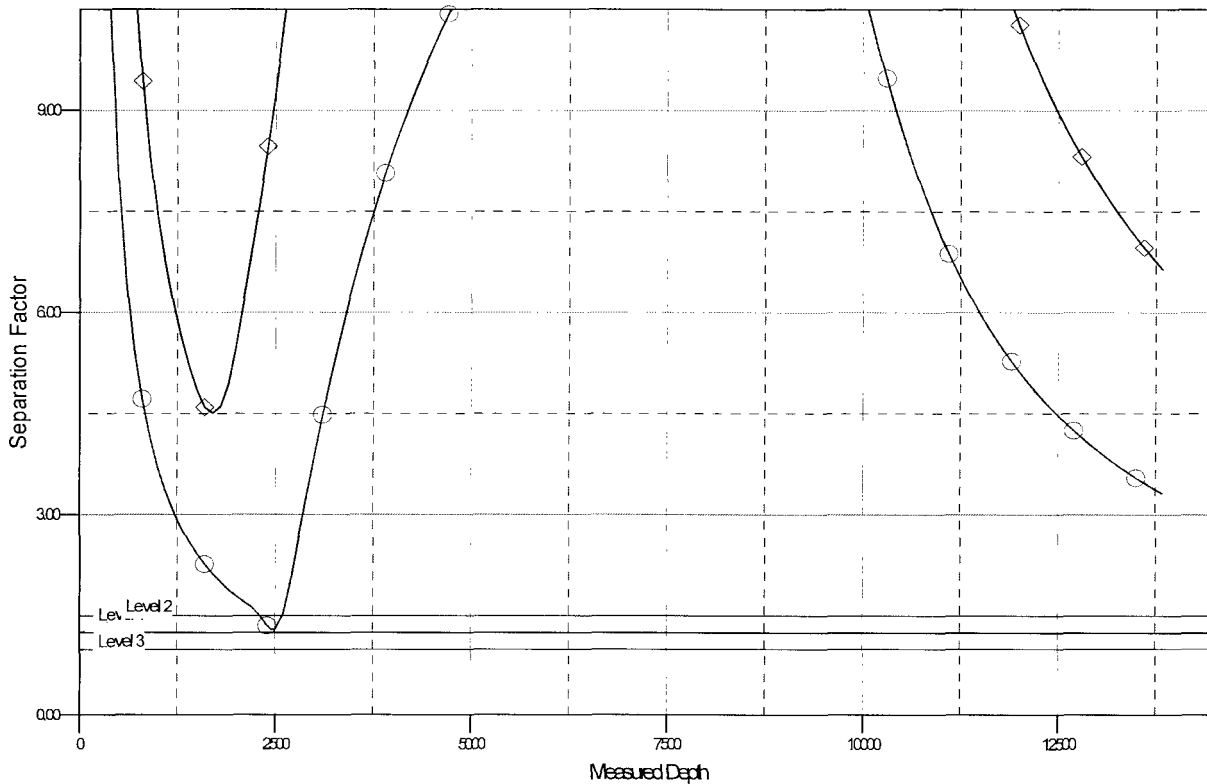
Site Error: 0.00 usft
Reference Well: C 17 State 1H
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1

Local Co-ordinate Reference: Well C 17 State 1H
TVD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
MD Reference: GL 3154 + KB 22 = @ 3176.00usft (Orion Pegasus)
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Output errors are at 2.00 sigma
Database: Midland District
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Reference Depths are relative to GL 3154 + KB 22 = @ 3176.00usft (O
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: C 17 State 1H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.07°

Separation Factor Plot



LEGEND

○ C 17 State 2H, Wellbore #1, Plan #1 V0 ♦ C 17 State 3H, Wellbore #1, Plan #1 V0