

MAR 18 2019

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WPX Energy

Eddy County, New Mexico (NAD 83)

Frontier 32-23-26 State Pad

Frontier 32-23-26 State 431H

Wellbore #1

30-015-45274

Design: Actual

WPX Final Survey Report

10 December, 2018



Scientific Drilling, Intl
WPX Final Survey Report

Company:	WPX Energy	Local Co-ordinate Reference:	Well Frontier 32-23-26 State 431H
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Site:	Frontier 32-23-26 State Pad	MD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

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	Frontier 32-23-26 State Pad		
Site Position:		Northing:	456,164.70 usft
From:	Map	Easting:	549,203.30 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.254070
		Longitude:	-104.307888
		Grid Convergence:	0.01 °

Well:		Frontier 32-23-26 State 431H				
Well Position	+N/-S	0.00 usft	Northing:	456,164.70 usft	Latitude:	32.254070
	+E/-W	0.00 usft	Easting:	549,203.30 usft	Longitude:	-104.307888
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,437.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	11/25/2018	7.37	59.92	47,874

Design	Actual			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	269.62

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Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Survey Program		Date 12/10/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
204.00	350.00	SDI MWD - Surface (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	
512.00	8,236.00	SDI MWD - Intermediate (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	
8,355.00	9,091.00	SDI MWD - Curve (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	
9,199.00	13,682.00	SDI MWD - Lateral (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	456,164.70	549,203.30	
204.00	0.05	207.53	204.00	-0.08	-0.04	0.04	0.09	207.53	456,164.62	549,203.26	
267.00	0.21	202.06	267.00	-0.21	-0.10	0.10	0.23	204.81	456,164.49	549,203.20	
350.00	0.21	220.96	350.00	-0.47	-0.25	0.26	0.53	208.59	456,164.23	549,203.05	
512.00	0.65	254.12	511.99	-0.94	-1.33	1.34	1.63	234.75	456,163.76	549,201.97	
605.00	0.72	253.99	604.99	-1.25	-2.40	2.41	2.71	242.55	456,163.45	549,200.90	
697.00	0.92	251.85	696.98	-1.64	-3.66	3.67	4.01	245.90	456,163.06	549,199.64	
790.00	0.86	253.67	789.97	-2.07	-5.04	5.05	5.45	247.71	456,162.63	549,198.26	
882.00	1.16	243.66	881.95	-2.67	-6.54	6.55	7.06	247.76	456,162.03	549,196.76	
975.00	1.41	245.99	974.93	-3.56	-8.42	8.45	9.14	247.11	456,161.14	549,194.88	
1,067.00	0.56	238.97	1,066.91	-4.25	-9.84	9.87	10.72	246.65	456,160.45	549,193.46	
1,160.00	0.97	66.77	1,159.91	-4.17	-9.51	9.54	10.36	246.31	456,160.53	549,193.79	
1,252.00	0.39	76.34	1,251.90	-3.79	-8.49	8.51	9.30	245.94	456,160.91	549,194.81	
1,347.00	0.05	144.66	1,346.90	-3.75	-8.15	8.18	8.97	245.30	456,160.95	549,195.15	
1,442.00	0.24	181.14	1,441.90	-3.98	-8.13	8.16	9.05	243.91	456,160.72	549,195.17	
1,536.00	0.30	250.98	1,535.90	-4.26	-8.37	8.40	9.39	243.03	456,160.44	549,194.93	
1,631.00	0.23	205.05	1,630.90	-4.51	-8.68	8.71	9.79	242.54	456,160.19	549,194.62	
1,726.00	0.39	209.82	1,725.90	-4.97	-8.93	8.96	10.21	240.91	456,159.73	549,194.37	
1,745.00	0.69	243.54	1,744.90	-5.07	-9.06	9.09	10.38	240.76	456,159.63	549,194.24	
1,917.00	0.69	230.50	1,916.89	-5.19	-10.79	10.83	12.44	240.14	456,158.51	549,192.51	

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Site:	Frontier 32-23-26 State Pad	MD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)
2,012.00	0.55	235.43	2,011.88	-6.82	-11.60	11.65	13.46	239.57	456,157.88	549,191.70
2,106.00	0.76	243.98	2,105.88	-7.34	-12.53	12.58	14.53	239.63	456,157.36	549,190.77
2,201.00	0.97	248.45	2,200.86	-7.92	-13.85	13.90	15.95	240.25	456,156.78	549,189.45
2,296.00	0.57	228.61	2,295.86	-8.52	-14.95	15.01	17.21	240.31	456,156.18	549,188.35
2,391.00	0.59	203.99	2,390.85	-9.28	-15.50	15.57	18.07	239.09	456,155.42	549,187.80
2,485.00	0.67	196.27	2,484.85	-10.25	-15.86	15.92	18.88	237.11	456,154.45	549,187.44
2,580.00	0.88	193.22	2,579.84	-11.50	-16.18	16.25	19.85	234.60	456,153.20	549,187.12
2,675.00	0.76	199.68	2,674.83	-12.80	-16.56	16.64	20.93	232.29	456,151.90	549,186.74
2,770.00	0.79	195.27	2,769.82	-14.03	-16.94	17.03	21.99	230.38	456,150.67	549,186.36
2,864.00	0.77	198.51	2,863.81	-15.25	-17.31	17.41	23.07	228.63	456,149.45	549,185.99
2,959.00	1.81	116.26	2,958.79	-16.52	-16.17	16.28	23.12	224.39	456,148.18	549,187.13
3,054.00	2.61	105.01	3,053.72	-17.74	-12.74	12.85	21.84	215.67	456,146.96	549,190.56
3,148.00	3.58	97.41	3,147.58	-18.68	-7.76	7.88	20.22	202.56	456,146.02	549,195.54
3,243.00	4.30	91.14	3,242.36	-19.13	-1.26	1.38	19.17	183.75	456,145.57	549,202.04
3,338.00	5.90	79.02	3,336.98	-18.27	7.10	-6.98	19.60	158.76	456,146.43	549,210.40
3,432.00	6.54	72.58	3,430.43	-15.75	16.95	-16.85	23.14	132.89	456,148.95	549,220.25
3,527.00	5.84	71.67	3,524.87	-12.61	26.70	-26.62	29.53	115.28	456,152.09	549,230.00
3,621.00	5.05	70.67	3,618.45	-9.73	35.14	-35.08	36.47	105.48	456,154.97	549,238.44
3,716.00	5.43	66.49	3,713.05	-6.56	43.21	-43.17	43.71	98.63	456,158.14	549,246.51
3,811.00	6.51	60.01	3,807.54	-2.07	52.00	-51.98	52.04	92.28	456,162.63	549,255.30
3,905.00	6.14	60.06	3,900.96	3.10	60.97	-60.99	61.05	87.09	456,167.80	549,264.27
4,000.00	5.64	60.48	3,995.46	7.94	69.43	-69.49	69.89	83.48	456,172.64	549,272.73
4,095.00	6.14	61.77	4,089.96	12.64	77.97	-78.05	78.99	80.79	456,177.34	549,281.27
4,190.00	7.48	61.24	4,184.29	18.02	87.87	-87.99	89.70	78.41	456,182.72	549,291.17
4,284.00	6.87	58.97	4,277.55	23.86	98.05	-98.21	100.91	76.32	456,188.56	549,301.35
4,378.00	5.91	58.48	4,370.97	29.29	106.99	-107.19	110.93	74.69	456,193.99	549,310.29
4,473.00	5.23	58.02	4,465.52	34.14	114.84	-115.06	119.80	73.44	456,198.84	549,318.14

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)	
4,568.00	5.53	67.74	4,560.10	38.17	122.75	-123.00	128.54	72.73	456,202.87	549,326.05	
4,662.00	6.40	70.01	4,653.59	41.67	131.86	-132.13	138.29	72.46	456,206.37	549,335.16	
4,757.00	5.67	69.16	4,748.06	45.15	141.22	-141.52	148.27	72.27	456,209.85	549,344.52	
4,852.00	5.27	71.71	4,842.83	48.19	149.75	-150.07	157.31	72.16	456,212.89	549,353.05	
4,946.00	5.56	76.31	4,936.21	50.62	158.27	-158.61	166.17	72.26	456,215.32	549,361.57	
5,041.00	6.70	82.52	5,030.67	52.43	168.24	-168.58	176.22	72.69	456,217.13	549,371.54	
5,136.00	5.71	80.97	5,125.11	53.90	178.40	-178.76	186.37	73.19	456,218.60	549,381.70	
5,230.00	5.70	82.61	5,218.64	55.23	187.65	-188.01	195.61	73.60	456,219.93	549,390.95	
5,325.00	5.38	82.49	5,313.20	56.42	196.74	-197.11	204.67	74.00	456,221.12	549,400.04	
5,419.00	4.47	82.70	5,406.85	57.46	204.75	-205.12	212.66	74.32	456,222.16	549,408.05	
5,514.00	4.37	73.13	5,501.57	58.98	211.88	-212.27	219.94	74.44	456,223.68	549,415.18	
5,608.00	4.60	64.72	5,595.28	61.63	218.72	-219.12	227.24	74.26	456,226.33	549,422.02	
5,703.00	5.89	66.39	5,689.89	65.21	226.63	-227.06	235.83	73.95	456,229.91	549,429.93	
5,797.00	5.22	63.74	5,783.44	69.04	234.88	-235.34	244.82	73.62	456,233.74	549,438.18	
5,892.00	3.47	70.86	5,878.17	71.89	241.48	-241.95	251.95	73.42	456,236.59	549,444.78	
5,986.00	2.33	86.22	5,972.05	72.95	246.07	-246.55	256.66	73.49	456,237.65	549,449.37	
6,081.00	3.20	81.26	6,066.94	73.48	250.62	-251.10	261.17	73.66	456,238.18	549,453.92	
6,175.00	4.64	76.87	6,160.71	74.74	256.91	-257.40	267.57	73.78	456,239.44	549,460.21	
6,270.00	4.42	75.64	6,255.42	76.52	264.20	-264.70	275.06	73.85	456,241.22	549,467.50	
6,365.00	3.24	76.96	6,350.20	78.04	270.36	-270.88	281.40	73.90	456,242.74	549,473.66	
6,459.00	2.64	72.20	6,444.08	79.30	275.01	-275.53	286.22	73.92	456,244.00	549,478.31	
6,554.00	1.74	68.22	6,539.01	80.50	278.44	-278.96	289.84	73.87	456,245.20	549,481.74	
6,649.00	1.46	60.73	6,633.97	81.63	280.83	-281.37	292.45	73.79	456,246.33	549,484.13	
6,728.00	1.35	52.45	6,712.95	82.69	282.45	-282.99	294.30	73.58	456,247.39	549,485.75	
6,838.00	0.98	68.62	6,822.92	83.82	284.35	-284.90	296.45	73.58	456,248.52	549,487.65	
6,933.00	0.67	76.40	6,917.91	84.25	285.65	-286.20	297.81	73.57	456,248.95	549,488.95	
7,028.00	0.26	47.67	7,012.91	84.52	286.35	-286.90	298.56	73.55	456,249.22	549,489.65	

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Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)	
7,122.00	0.37	26.10	7,106.91	84.94	286.64	-287.19	298.96	73.49	456,249.64	549,489.94	
7,217.00	0.11	266.33	7,201.91	85.21	286.68	-287.24	299.08	73.45	456,249.91	549,489.98	
7,312.00	0.60	290.67	7,296.91	85.38	286.12	-286.68	298.59	73.39	456,250.08	549,489.42	
7,406.00	0.17	182.90	7,390.91	85.41	285.66	-286.22	298.15	73.35	456,250.11	549,488.86	
7,501.00	0.55	127.14	7,485.90	85.00	286.01	-286.57	298.38	73.45	456,249.70	549,489.31	
7,596.00	1.30	147.32	7,580.89	83.81	286.96	-287.51	298.95	73.72	456,248.51	549,490.26	
7,690.00	2.16	146.48	7,674.85	81.44	288.51	-289.05	299.79	74.24	456,246.14	549,491.81	
7,785.00	3.04	123.59	7,769.75	78.55	291.60	-292.11	302.00	74.92	456,243.25	549,494.90	
7,880.00	1.67	114.87	7,864.67	76.58	294.95	-295.46	304.73	75.45	456,241.28	549,498.25	
7,974.00	0.44	82.89	7,958.65	76.05	296.56	-297.05	306.15	75.62	456,240.75	549,499.86	
8,069.00	0.59	79.72	8,053.65	76.18	297.40	-297.90	307.00	75.63	456,240.88	549,500.70	
8,164.00	1.25	127.47	8,148.64	75.64	298.70	-299.20	308.13	75.79	456,240.34	549,502.00	
8,236.00	1.41	150.42	8,220.62	74.39	299.76	-300.25	308.85	76.06	456,239.09	549,503.06	
8,357.00	3.03	252.22	8,341.55	72.12	297.45	-297.92	306.07	76.37	456,236.82	549,500.75	
8,451.00	11.89	269.05	8,434.67	71.19	285.38	-285.84	294.13	75.99	456,235.89	549,488.68	
8,546.00	22.43	267.23	8,525.32	70.15	257.41	-257.87	266.80	74.76	456,234.85	549,460.71	
8,641.00	35.33	269.04	8,608.33	68.81	211.65	-212.10	222.56	71.99	456,233.51	549,414.95	
8,736.00	42.61	273.52	8,682.15	70.33	152.00	-152.46	167.48	65.17	456,235.03	549,355.30	
8,830.00	50.71	273.76	8,746.61	74.67	83.83	-84.32	112.26	48.30	456,239.37	549,287.13	
8,925.00	59.93	271.94	8,800.61	78.48	5.89	-6.41	78.71	4.29	456,243.18	549,209.19	
8,933.12	60.64	271.96	8,804.64	78.72	-1.16	0.64	78.73	359.15	456,243.42	549,202.14	
FTP Actual 8933.12 MD - Frontier431H FTP											
9,020.00	68.21	272.13	8,842.12	81.52	-79.42	78.88	113.81	315.75	456,246.22	549,123.88	
9,091.00	73.20	272.48	8,865.57	84.22	-146.36	145.80	168.86	299.92	456,248.92	549,056.94	
9,199.00	79.67	273.04	8,890.89	89.28	-251.17	250.57	266.56	289.57	456,253.98	548,952.13	
9,221.00	82.58	272.52	8,894.28	90.33	-272.88	272.27	287.44	288.32	456,255.03	548,930.42	
9,316.00	89.36	270.87	8,900.96	93.13	-367.54	366.91	379.16	284.22	456,257.83	548,835.76	

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Site:	Frontier 32-23-26 State Pad	MD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)	
9,411.00	90.17	270.69	8,901.35	94.42	-462.53	461.89	472.07	281.54	456,259.12	548,740.77	
9,506.00	90.20	270.30	8,901.04	95.24	-557.53	556.88	565.60	279.69	456,259.94	548,645.77	
9,600.00	89.76	269.05	8,901.07	94.71	-651.52	650.88	658.37	278.27	456,259.41	548,551.78	
9,895.00	90.34	269.20	8,900.99	93.26	-746.51	745.88	752.31	277.12	456,257.96	548,456.79	
9,790.00	90.54	270.16	8,900.26	92.73	-841.51	840.87	846.60	276.29	456,257.43	548,361.79	
9,885.00	90.17	269.82	8,899.67	92.71	-936.50	935.87	941.08	275.65	456,257.41	548,266.80	
9,980.00	89.26	269.15	8,900.14	91.86	-1,031.50	1,030.86	1,035.58	275.09	456,256.56	548,171.80	
10,074.00	88.26	267.87	8,902.18	89.41	-1,125.44	1,124.82	1,128.99	274.54	456,254.11	548,077.86	
10,169.00	89.46	268.65	8,904.07	86.53	-1,220.37	1,219.77	1,223.44	274.06	456,251.23	547,982.93	
10,264.00	90.44	268.74	8,904.15	84.37	-1,315.35	1,314.76	1,318.05	273.67	456,249.07	547,887.95	
10,359.00	90.10	267.58	8,903.70	81.32	-1,410.30	1,409.73	1,412.64	273.30	456,246.02	547,793.00	
10,454.00	89.93	268.00	8,903.68	77.65	-1,505.23	1,504.68	1,507.23	272.95	456,242.35	547,698.07	
10,548.00	91.91	269.55	8,902.17	75.64	-1,599.18	1,598.65	1,600.97	272.71	456,240.34	547,604.12	
10,643.00	91.34	268.61	8,899.47	74.12	-1,694.13	1,693.60	1,695.75	272.51	456,238.82	547,509.17	
10,738.00	90.87	268.36	8,897.64	71.61	-1,789.08	1,788.57	1,790.51	272.29	456,236.31	547,414.22	
10,833.00	91.65	269.34	8,895.55	69.70	-1,884.04	1,883.53	1,885.33	272.12	456,234.40	547,319.26	
10,928.00	92.45	269.96	8,892.16	69.12	-1,978.97	1,978.47	1,980.18	272.00	456,233.82	547,224.33	
11,022.00	92.36	270.25	8,888.21	69.29	-2,072.89	2,072.39	2,074.05	271.91	456,233.99	547,130.41	
11,117.00	92.28	270.53	8,884.36	69.94	-2,167.81	2,167.30	2,168.94	271.85	456,234.64	547,035.49	
11,212.00	93.12	274.65	8,879.89	74.22	-2,262.59	2,262.05	2,263.80	271.88	456,236.92	546,940.71	
11,307.00	89.26	272.82	8,877.92	80.41	-2,357.34	2,356.76	2,358.71	271.95	456,245.11	546,845.96	
11,401.00	88.56	272.46	8,879.70	84.74	-2,451.23	2,450.61	2,452.69	271.98	456,249.44	546,752.07	
11,496.00	88.05	272.83	8,882.51	89.12	-2,546.08	2,545.44	2,547.64	272.00	456,253.82	546,657.22	
11,591.00	88.66	271.03	8,885.24	92.32	-2,640.98	2,640.31	2,642.60	272.00	456,257.02	546,562.32	
11,686.00	90.37	270.19	8,886.04	93.33	-2,735.97	2,735.29	2,737.56	271.95	456,258.03	546,467.33	
11,780.00	89.33	269.32	8,886.29	92.93	-2,829.97	2,829.29	2,831.49	271.88	456,257.63	546,373.33	
11,875.00	90.17	269.72	8,886.71	92.13	-2,924.96	2,924.29	2,926.41	271.80	456,256.83	546,278.34	

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WPX Final Survey Report

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Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Site:	Frontier 32-23-26 State Pad	MD Reference:	GL 3437 + RKB 26 = @ 3463.00usft (HP 265)
Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (bearing)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	Closure Distance (usft)	Closure Azimuth (bearing)	Northing (usft)	Easting (usft)	
11,970.00	90.37	269.16	8,886.26	91.20	-3,019.96	3,019.29	3,021.33	271.73	456,255.90	546,183.34	
12,065.00	89.60	268.77	8,886.28	89.49	-3,114.94	3,114.28	3,116.23	271.65	456,254.19	546,088.36	
12,160.00	89.83	267.29	8,886.76	86.22	-3,209.88	3,209.24	3,211.04	271.54	456,250.92	545,993.42	
12,254.00	92.72	270.02	8,884.66	84.01	-3,303.81	3,303.18	3,304.88	271.46	456,248.71	545,899.49	
12,349.00	92.78	269.38	8,880.11	83.52	-3,398.70	3,398.07	3,399.73	271.41	456,248.22	545,804.60	
12,444.00	92.72	269.07	8,875.55	82.23	-3,493.58	3,492.96	3,494.55	271.35	456,246.93	545,709.72	
12,539.00	92.68	268.90	8,871.07	80.55	-3,588.46	3,587.85	3,589.37	271.29	456,245.25	545,614.84	
12,634.00	92.28	269.50	8,866.96	79.23	-3,683.36	3,682.76	3,684.22	271.23	456,243.93	545,519.94	
12,728.00	90.67	268.73	8,864.54	77.78	-3,777.32	3,776.72	3,778.12	271.18	456,242.48	545,425.98	
12,823.00	90.23	268.63	8,863.80	75.59	-3,872.29	3,871.70	3,873.03	271.12	456,240.29	545,331.01	
12,918.00	89.66	268.32	8,863.89	73.06	-3,967.26	3,966.68	3,967.93	271.06	456,237.76	545,236.04	
13,013.00	89.50	268.43	8,864.58	70.37	-4,062.21	4,061.66	4,062.82	270.99	456,235.07	545,141.09	
13,108.00	90.24	269.73	8,864.80	68.84	-4,157.20	4,156.65	4,157.77	270.95	456,233.54	545,046.10	
13,202.00	90.30	270.69	8,864.36	69.19	-4,251.20	4,250.64	4,251.76	270.93	456,233.89	544,952.10	
13,297.00	92.08	272.28	8,862.38	71.65	-4,346.14	4,345.57	4,346.73	270.94	456,236.35	544,857.16	
13,392.00	94.10	274.02	8,857.26	76.86	-4,440.85	4,440.24	4,441.51	270.99	456,241.56	544,762.45	
13,487.00	93.57	274.04	8,850.91	83.52	-4,535.40	4,534.75	4,536.17	271.05	456,248.22	544,667.90	
13,578.27	91.51	272.92	8,846.86	89.05	-4,626.40	4,625.71	4,627.26	271.10	456,253.75	544,576.90	
Frontier431H LTP											
13,580.55	91.46	272.90	8,846.80	89.17	-4,628.68	4,627.99	4,629.54	271.10	456,253.87	544,574.62	
LTP Actual 13580.55 MD											
13,608.00	90.84	272.56	8,846.25	90.48	-4,656.10	4,655.39	4,656.97	271.11	456,255.18	544,547.20	
SDI MWD											
13,680.96	90.84	272.56	8,845.18	93.74	-4,728.98	4,728.25	4,729.91	271.14	456,258.44	544,474.32	
Frontier431H BHL											
13,682.00	90.84	272.56	8,845.17	93.78	-4,730.01	4,729.29	4,730.94	271.14	456,258.48	544,473.29	
Bit Projection											

Scientific Drilling, Intl

WPX Final Survey Report

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Well:	Frontier 32-23-26 State 431H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	Midland District

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,933.12	8,804.64	78.72	-1.16	FTP Actual 8933.12' MD
13,580.55	8,846.80	89.17	-4,628.68	LTP Actual 13580.55' MD
13,608.00	8,846.25	90.48	-4,656.10	SDI MWD
13,682.00	8,845.17	93.78	-4,730.01	Bit Projection

Checked By: _____	Approved By: _____	Date: _____
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