

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 21 2018

RECEIVED

WPX Energy

Eddy County, New Mexico NAD 83

Cass Draw/Johnson 10-23-27 Fee

Johnson 10-23-27 Fee 401H

API: ???

Wellbore #1

30-015-45044

Plan: Plan #1

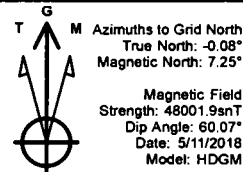
Standard Planning Report

14 May, 2018

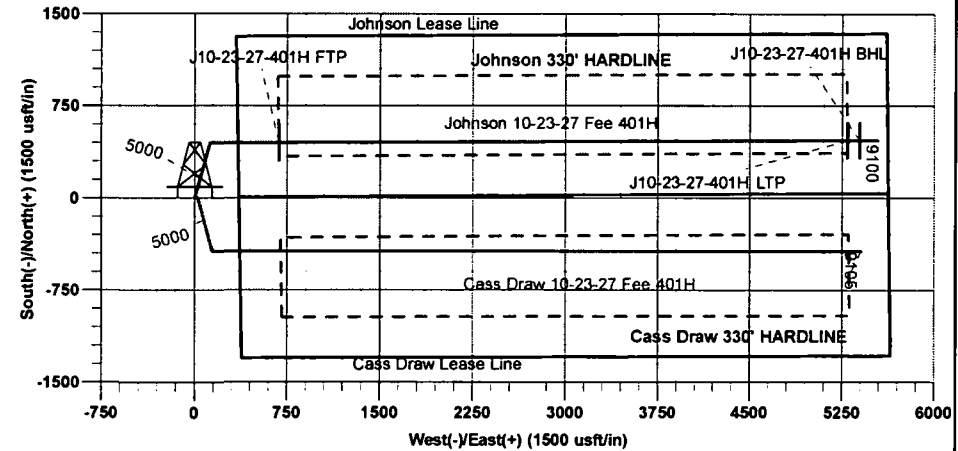
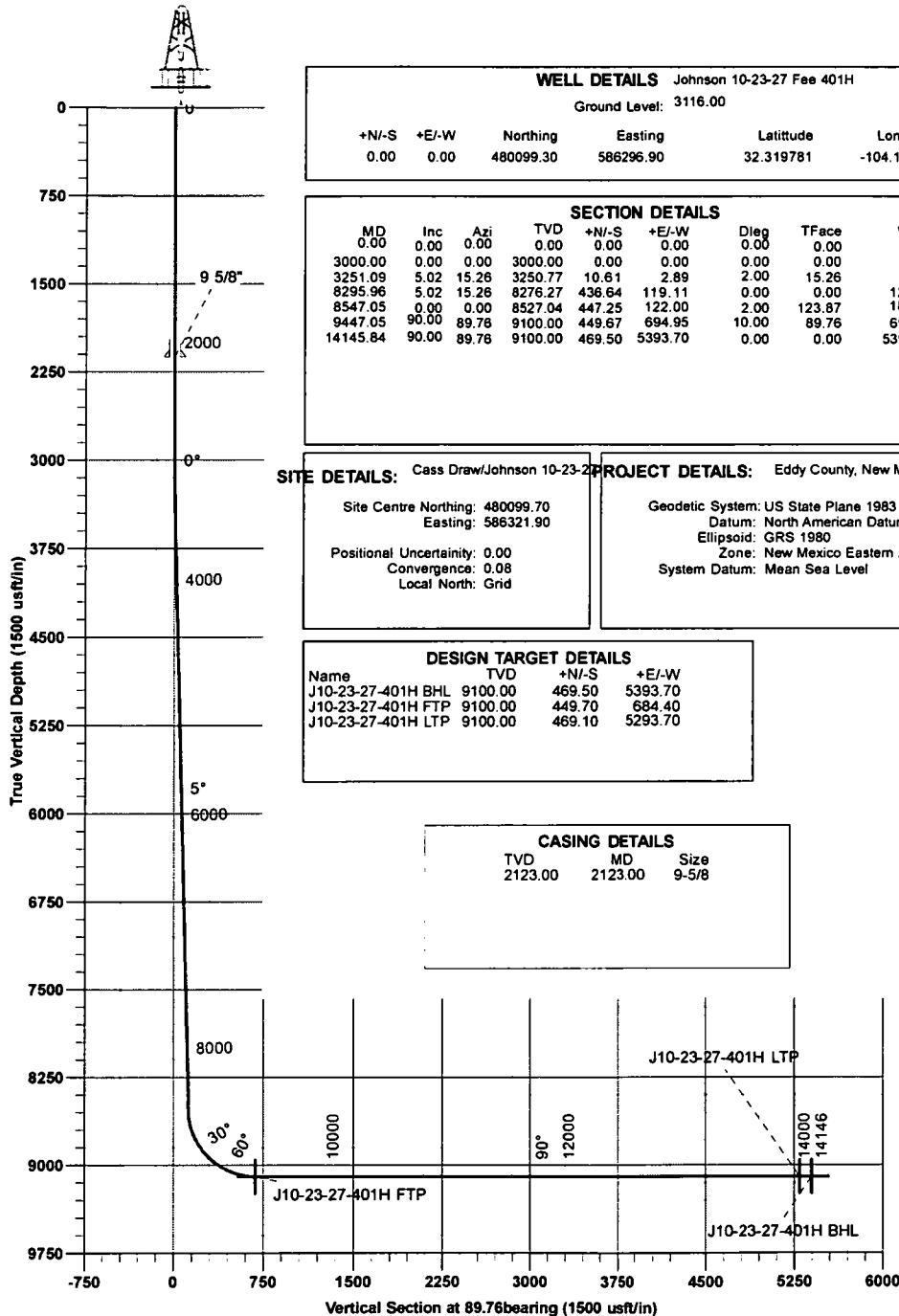


Johnson 10-23-27 Fee 401H
Eddy County, New Mexico NAD 83
Northing: 480099.30
Easting: 586296.90
Plan #1

GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
 3116.00



To convert a Magnetic Direction to a Grid Direction, Add 7.26°
 To convert a True Direction to a Grid Direction, Subtract 0.08°



Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Johnson 10-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
Site:	Cass Draw/Johnson 10-23-27 Fee	North Reference:	Grid
Well:	Johnson 10-23-27 Fee 401H	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	Cass Draw/Johnson 10-23-27 Fee			
Site Position:		Northing:	480,099.70 usft	Latitude: 32.319783
From:	Map	Easting:	586,321.90 usft	Longitude: -104.187709
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.08 °

Well	Johnson 10-23-27 Fee 401H			
Well Position	+N/-S	-0.40 usft	Northing:	480,099.30 usft
	+E/-W	-25.00 usft	Easting:	586,296.90 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 3,116.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/11/2018	7.33	60.07	48,002

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	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	89.76

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	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,251.09	5.02	15.26	3,250.77	10.61	2.89	2.00	2.00	0.00	15.26	
8,295.96	5.02	15.26	8,276.27	436.64	119.11	0.00	0.00	0.00	0.00	
8,547.05	0.00	0.00	8,527.04	447.25	122.00	2.00	-2.00	0.00	180.00	
9,447.05	90.00	89.76	9,100.00	449.67	694.95	10.00	10.00	9.97	89.76	
14,145.84	90.00	89.76	9,100.00	469.50	5,393.70	0.00	0.00	0.00	0.00	J10-23-27-401H BHL

Scientific Drilling, Intl

Planning Report

Database: Midland District
 Company: WPX Energy
 Project: Eddy County, New Mexico NAD 83
 Site: Cass Draw/Johnson 10-23-27 Fee
 Well: Johnson 10-23-27 Fee 401H
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference: Well Johnson 10-23-27 Fee 401H
 TVD Reference: GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
 MD Reference: GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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
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
2,123.00	0.00	0.00	2,123.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon (Base of Salt) - 9 5/8"									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	2.00	15.26	3,099.98	1.68	0.46	0.47	2.00	2.00	0.00
3,139.05	2.78	15.26	3,139.00	3.26	0.89	0.90	2.00	2.00	0.00
Cherry Canyon									
3,200.00	4.00	15.26	3,199.84	6.73	1.84	1.86	2.00	2.00	0.00
3,251.09	5.02	15.26	3,250.77	10.61	2.89	2.94	2.00	2.00	0.00
3,300.00	5.02	15.26	3,299.49	14.74	4.02	4.08	0.00	0.00	0.00
3,400.00	5.02	15.26	3,399.11	23.18	6.32	6.42	0.00	0.00	0.00
3,500.00	5.02	15.26	3,498.72	31.63	8.63	8.76	0.00	0.00	0.00
3,600.00	5.02	15.26	3,598.34	40.07	10.93	11.10	0.00	0.00	0.00
3,700.00	5.02	15.26	3,697.96	48.52	13.23	13.44	0.00	0.00	0.00
3,800.00	5.02	15.26	3,797.57	56.96	15.54	15.78	0.00	0.00	0.00
3,900.00	5.02	15.26	3,897.19	65.41	17.84	18.12	0.00	0.00	0.00
4,000.00	5.02	15.26	3,996.80	73.85	20.15	20.45	0.00	0.00	0.00
4,097.57	5.02	15.26	4,094.00	82.09	22.39	22.74	0.00	0.00	0.00
Brushy Canyon									
4,100.00	5.02	15.26	4,096.42	82.30	22.45	22.79	0.00	0.00	0.00
4,200.00	5.02	15.26	4,196.04	90.74	24.75	25.13	0.00	0.00	0.00
4,300.00	5.02	15.26	4,295.65	99.19	27.06	27.47	0.00	0.00	0.00
4,400.00	5.02	15.26	4,395.27	107.63	29.36	29.81	0.00	0.00	0.00
4,500.00	5.02	15.26	4,494.88	116.08	31.66	32.15	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

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 Project: Eddy County, New Mexico NAD 83
 Site: Cass Draw/Johnson 10-23-27 Fee
 Well: Johnson 10-23-27 Fee 401H
 Wellbore: Wellbore #1
 Design: Plan #1

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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)
4,600.00	5.02	15.26	4,594.50	124.52	33.97	34.49	0.00	0.00	0.00
4,700.00	5.02	15.26	4,694.12	132.97	36.27	36.83	0.00	0.00	0.00
4,800.00	5.02	15.26	4,793.73	141.41	38.57	39.17	0.00	0.00	0.00
4,900.00	5.02	15.26	4,893.35	149.86	40.88	41.51	0.00	0.00	0.00
5,000.00	5.02	15.26	4,992.97	158.30	43.18	43.84	0.00	0.00	0.00
5,100.00	5.02	15.26	5,092.58	166.75	45.48	46.18	0.00	0.00	0.00
5,200.00	5.02	15.26	5,192.20	175.19	47.79	48.52	0.00	0.00	0.00
5,300.00	5.02	15.26	5,291.81	183.64	50.09	50.86	0.00	0.00	0.00
5,400.00	5.02	15.26	5,391.43	192.08	52.40	53.20	0.00	0.00	0.00
5,500.00	5.02	15.26	5,491.05	200.53	54.70	55.54	0.00	0.00	0.00
5,575.24	5.02	15.26	5,566.00	206.88	56.43	57.30	0.00	0.00	0.00
Bone Spring									
5,600.00	5.02	15.26	5,590.66	208.97	57.00	57.88	0.00	0.00	0.00
5,700.00	5.02	15.26	5,690.28	217.42	59.31	60.22	0.00	0.00	0.00
5,800.00	5.02	15.26	5,789.89	225.86	61.61	62.56	0.00	0.00	0.00
5,900.00	5.02	15.26	5,889.51	234.31	63.91	64.89	0.00	0.00	0.00
5,945.66	5.02	15.26	5,935.00	238.16	64.97	65.96	0.00	0.00	0.00
Avalon									
6,000.00	5.02	15.26	5,989.13	242.75	66.22	67.23	0.00	0.00	0.00
6,100.00	5.02	15.26	6,088.74	251.20	68.52	69.57	0.00	0.00	0.00
6,200.00	5.02	15.26	6,188.36	259.64	70.82	71.91	0.00	0.00	0.00
6,300.00	5.02	15.26	6,287.98	268.09	73.13	74.25	0.00	0.00	0.00
6,400.00	5.02	15.26	6,387.59	276.53	75.43	76.59	0.00	0.00	0.00
6,500.00	5.02	15.26	6,487.21	284.97	77.73	78.93	0.00	0.00	0.00
6,600.00	5.02	15.26	6,586.82	293.42	80.04	81.27	0.00	0.00	0.00
6,633.30	5.02	15.26	6,620.00	296.23	80.81	82.05	0.00	0.00	0.00
1st Bone Spring Sand									
6,700.00	5.02	15.26	6,686.44	301.86	82.34	83.61	0.00	0.00	0.00
6,800.00	5.02	15.26	6,786.06	310.31	84.65	85.94	0.00	0.00	0.00
6,883.26	5.02	15.26	6,869.00	317.34	86.56	87.89	0.00	0.00	0.00
2nd Bone Spring Lime									
6,900.00	5.02	15.26	6,885.67	318.75	86.95	88.28	0.00	0.00	0.00
7,000.00	5.02	15.26	6,985.29	327.20	89.25	90.62	0.00	0.00	0.00
7,100.00	5.02	15.26	7,084.90	335.64	91.56	92.96	0.00	0.00	0.00
7,200.00	5.02	15.26	7,184.52	344.09	93.86	95.30	0.00	0.00	0.00
7,274.77	5.02	15.26	7,259.00	350.40	95.58	97.05	0.00	0.00	0.00
2nd Bone Spring Sand									
7,300.00	5.02	15.26	7,284.14	352.53	96.16	97.64	0.00	0.00	0.00
7,400.00	5.02	15.26	7,383.75	360.98	98.47	99.98	0.00	0.00	0.00
7,441.41	5.02	15.26	7,425.00	364.48	99.42	100.95	0.00	0.00	0.00
3rd Bone Spring Lime									
7,500.00	5.02	15.26	7,483.37	369.42	100.77	102.32	0.00	0.00	0.00
7,600.00	5.02	15.26	7,582.99	377.87	103.07	104.66	0.00	0.00	0.00
7,700.00	5.02	15.26	7,682.60	386.31	105.38	107.00	0.00	0.00	0.00
7,800.00	5.02	15.26	7,782.22	394.76	107.68	109.33	0.00	0.00	0.00
7,900.00	5.02	15.26	7,881.83	403.20	109.98	111.67	0.00	0.00	0.00
8,000.00	5.02	15.26	7,981.45	411.65	112.29	114.01	0.00	0.00	0.00
8,100.00	5.02	15.26	8,081.07	420.09	114.59	116.35	0.00	0.00	0.00
8,200.00	5.02	15.26	8,180.68	428.54	116.90	118.69	0.00	0.00	0.00
8,295.96	5.02	15.26	8,276.27	436.64	119.11	120.93	0.00	0.00	0.00
8,300.00	4.94	15.26	8,280.30	436.98	119.20	121.03	2.00	-2.00	0.00
8,400.00	2.94	15.26	8,380.06	443.61	121.01	122.86	2.00	-2.00	0.00
8,500.00	0.94	15.26	8,480.00	446.88	121.90	123.77	2.00	-2.00	0.00

Scientific Drilling, Intl

Planning Report

Database: Midland District
 Company: WPX Energy
 Project: Eddy County, New Mexico NAD 83
 Site: Cass Draw/Johnson 10-23-27 Fee
 Well: Johnson 10-23-27 Fee 401H
 Wellbore: Wellbore #1
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Local Co-ordinate Reference: Well Johnson 10-23-27 Fee 401H
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 North Reference: Grid
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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)
8,547.05	0.00	0.00	8,527.04	447.25	122.00	123.87	2.00	-2.00	0.00
8,550.00	0.30	89.76	8,529.99	447.25	122.01	123.88	10.00	10.00	0.00
8,600.00	5.30	89.76	8,579.92	447.26	124.45	126.32	10.00	10.00	0.00
8,650.00	10.30	89.76	8,629.44	447.29	131.22	133.10	10.00	10.00	0.00
8,675.07	12.80	89.76	8,654.00	447.31	136.24	138.12	10.00	10.00	0.00
3rd Bone Spring Sand									
8,700.00	15.30	89.76	8,678.18	447.34	142.29	144.17	10.00	10.00	0.00
8,750.00	20.30	89.76	8,725.78	447.40	157.57	159.44	10.00	10.00	0.00
8,800.00	25.30	89.76	8,771.86	447.48	176.94	178.81	10.00	10.00	0.00
8,850.00	30.30	89.76	8,816.07	447.58	200.24	202.12	10.00	10.00	0.00
8,900.00	35.30	89.76	8,858.09	447.69	227.32	229.19	10.00	10.00	0.00
8,950.00	40.30	89.76	8,897.59	447.82	257.95	259.82	10.00	10.00	0.00
9,000.00	45.30	89.76	8,934.27	447.97	291.91	293.78	10.00	10.00	0.00
9,050.00	50.30	89.76	8,967.84	448.12	328.93	330.81	10.00	10.00	0.00
9,077.67	53.06	89.76	8,985.00	448.22	350.64	352.51	10.00	10.00	0.00
Wolfcamp Top									
9,100.00	55.30	89.76	8,998.07	448.29	368.74	370.62	10.00	10.00	0.00
9,125.29	57.82	89.76	9,012.00	448.38	389.84	391.72	10.00	10.00	0.00
WC_X									
9,150.00	60.30	89.76	9,024.71	448.47	411.04	412.91	10.00	10.00	0.00
9,200.00	65.30	89.76	9,047.56	448.66	455.49	457.37	10.00	10.00	0.00
9,250.00	70.30	89.76	9,066.45	448.85	501.77	503.64	10.00	10.00	0.00
9,299.09	75.20	89.76	9,081.00	449.05	548.64	550.51	10.00	10.00	0.00
WC_Y									
9,300.00	75.30	89.76	9,081.23	449.05	549.52	551.39	10.00	10.00	0.00
9,329.59	78.25	89.76	9,088.00	449.18	578.32	580.19	10.00	10.00	0.00
Top Target									
9,350.00	80.30	89.76	9,091.80	449.26	598.37	600.25	10.00	10.00	0.00
9,400.00	85.30	89.76	9,098.07	449.47	647.96	649.84	10.00	10.00	0.00
9,447.05	90.00	89.76	9,100.00	449.67	694.95	696.83	10.00	10.00	0.00
Landing Point									
9,500.00	90.00	89.76	9,100.00	449.89	747.90	749.78	0.00	0.00	0.00
9,600.00	90.00	89.76	9,100.00	450.31	847.90	849.78	0.00	0.00	0.00
9,700.00	90.00	89.76	9,100.00	450.74	947.90	949.78	0.00	0.00	0.00
9,800.00	90.00	89.76	9,100.00	451.16	1,047.90	1,049.78	0.00	0.00	0.00
9,900.00	90.00	89.76	9,100.00	451.58	1,147.90	1,149.78	0.00	0.00	0.00
10,000.00	90.00	89.76	9,100.00	452.00	1,247.90	1,249.78	0.00	0.00	0.00
10,100.00	90.00	89.76	9,100.00	452.42	1,347.90	1,349.78	0.00	0.00	0.00
10,200.00	90.00	89.76	9,100.00	452.85	1,447.90	1,449.78	0.00	0.00	0.00
10,300.00	90.00	89.76	9,100.00	453.27	1,547.90	1,549.78	0.00	0.00	0.00
10,400.00	90.00	89.76	9,100.00	453.69	1,647.90	1,649.78	0.00	0.00	0.00
10,500.00	90.00	89.76	9,100.00	454.11	1,747.90	1,749.78	0.00	0.00	0.00
10,600.00	90.00	89.76	9,100.00	454.53	1,847.90	1,849.78	0.00	0.00	0.00
10,700.00	90.00	89.76	9,100.00	454.96	1,947.89	1,949.78	0.00	0.00	0.00
10,800.00	90.00	89.76	9,100.00	455.38	2,047.89	2,049.78	0.00	0.00	0.00
10,900.00	90.00	89.76	9,100.00	455.80	2,147.89	2,149.78	0.00	0.00	0.00
11,000.00	90.00	89.76	9,100.00	456.22	2,247.89	2,249.78	0.00	0.00	0.00
11,100.00	90.00	89.76	9,100.00	456.64	2,347.89	2,349.78	0.00	0.00	0.00
11,200.00	90.00	89.76	9,100.00	457.07	2,447.89	2,449.78	0.00	0.00	0.00
11,300.00	90.00	89.76	9,100.00	457.49	2,547.89	2,549.78	0.00	0.00	0.00
11,400.00	90.00	89.76	9,100.00	457.91	2,647.89	2,649.78	0.00	0.00	0.00
11,500.00	90.00	89.76	9,100.00	458.33	2,747.89	2,749.78	0.00	0.00	0.00
11,600.00	90.00	89.76	9,100.00	458.76	2,847.89	2,849.78	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database: Midland District
 Company: WPX Energy
 Project: Eddy County, New Mexico NAD 83
 Site: Cass Draw/Johnson 10-23-27 Fee
 Well: Johnson 10-23-27 Fee 401H
 Wellbore: Wellbore #1
 Design: Plan #1

Local Co-ordinate Reference: Well Johnson 10-23-27 Fee 401H
 TVD Reference: GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
 MD Reference: GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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)
11,700.00	90.00	89.76	9,100.00	459.18	2,947.89	2,949.78	0.00	0.00	0.00
11,800.00	90.00	89.76	9,100.00	459.60	3,047.88	3,049.78	0.00	0.00	0.00
11,900.00	90.00	89.76	9,100.00	460.02	3,147.88	3,149.78	0.00	0.00	0.00
12,000.00	90.00	89.76	9,100.00	460.44	3,247.88	3,249.78	0.00	0.00	0.00
12,100.00	90.00	89.76	9,100.00	460.87	3,347.88	3,349.78	0.00	0.00	0.00
12,200.00	90.00	89.76	9,100.00	461.29	3,447.88	3,449.78	0.00	0.00	0.00
12,300.00	90.00	89.76	9,100.00	461.71	3,547.88	3,549.78	0.00	0.00	0.00
12,400.00	90.00	89.76	9,100.00	462.13	3,647.88	3,649.78	0.00	0.00	0.00
12,500.00	90.00	89.76	9,100.00	462.55	3,747.88	3,749.78	0.00	0.00	0.00
12,600.00	90.00	89.76	9,100.00	462.98	3,847.88	3,849.78	0.00	0.00	0.00
12,700.00	90.00	89.76	9,100.00	463.40	3,947.88	3,949.78	0.00	0.00	0.00
12,800.00	90.00	89.76	9,100.00	463.82	4,047.88	4,049.78	0.00	0.00	0.00
12,900.00	90.00	89.76	9,100.00	464.24	4,147.87	4,149.78	0.00	0.00	0.00
13,000.00	90.00	89.76	9,100.00	464.66	4,247.87	4,249.78	0.00	0.00	0.00
13,100.00	90.00	89.76	9,100.00	465.09	4,347.87	4,349.78	0.00	0.00	0.00
13,200.00	90.00	89.76	9,100.00	465.51	4,447.87	4,449.78	0.00	0.00	0.00
13,300.00	90.00	89.76	9,100.00	465.93	4,547.87	4,549.78	0.00	0.00	0.00
13,400.00	90.00	89.76	9,100.00	466.35	4,647.87	4,649.78	0.00	0.00	0.00
13,500.00	90.00	89.76	9,100.00	466.77	4,747.87	4,749.78	0.00	0.00	0.00
13,600.00	90.00	89.76	9,100.00	467.20	4,847.87	4,849.78	0.00	0.00	0.00
13,700.00	90.00	89.76	9,100.00	467.62	4,947.87	4,949.78	0.00	0.00	0.00
13,800.00	90.00	89.76	9,100.00	468.04	5,047.87	5,049.78	0.00	0.00	0.00
13,900.00	90.00	89.76	9,100.00	468.46	5,147.87	5,149.78	0.00	0.00	0.00
14,000.00	90.00	89.76	9,100.00	468.88	5,247.86	5,249.78	0.00	0.00	0.00
14,100.00	90.00	89.76	9,100.00	469.31	5,347.86	5,349.78	0.00	0.00	0.00
14,145.84	90.00	89.76	9,100.00	469.50	5,393.70	5,395.62	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
J10-23-27-401H FTP	0.00	0.00	9,100.00	449.70	684.40	480,549.00	586,981.30	32.321015	-104.185573
- plan misses target center by 0.13usft at 9436.50usft MD (9099.90 TVD, 449.62 N, 684.41 E)									
- Point									
J10-23-27-401H LTP	0.00	0.00	9,100.00	469.10	5,293.70	480,568.40	591,590.60	32.321050	-104.170651
- plan misses target center by 0.02usft at 14045.84usft MD (9100.00 TVD, 469.08 N, 5293.70 E)									
- Point									
J10-23-27-401H BHL	0.00	0.00	9,100.00	469.50	5,393.70	480,568.80	591,690.60	32.321051	-104.170328
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,123.00	2,123.00	9 5/8"	9-5/8	12-1/4

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Johnson 10-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
Project:	Eddy County, New Mexico NAD 83	MD Reference:	GL 3116 + RKB 30 = @ 3146.00usft (HP 265)
Site:	Cass Draw/Johnson 10-23-27 Fee	North Reference:	Grid
Well:	Johnson 10-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,123.00	2,108.70	Bell Canyon (Base of Salt)				
3,139.05	3,124.70	Cherry Canyon				
4,097.57	4,079.70	Brushy Canyon				
5,575.24	5,551.70	Bone Spring				
5,945.66	5,920.70	Avalon				
6,633.30	6,605.70	1st Bone Spring Sand				
6,883.26	6,854.70	2nd Bone Spring Lime				
7,274.77	7,244.70	2nd Bone Spring Sand				
7,441.41	7,410.70	3rd Bone Spring Lime				
8,675.07	8,639.70	3rd Bone Spring Sand				
9,077.67	8,970.70	Wolfcamp Top				
9,125.29	8,997.70	WC_X				
9,299.09	9,066.70	WC_Y				
9,329.59	9,073.70	Top Target				
9,447.05	9,085.70	Landing Point				