

WPX Energy

Eddy County, New Mexico (NAD 83)

Bloodhound 15-23-27 Fee Pad

Bloodhound 15-23-27 Fee 401H

API: ???

Wellbore #1

30.015-45471

**NM OIL CONSERVATION
ARTESIA DISTRICT**

NOV 29 2018

RECEIVED

Plan: Plan #3

Standard Planning Report

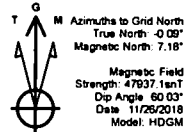
26 November, 2018



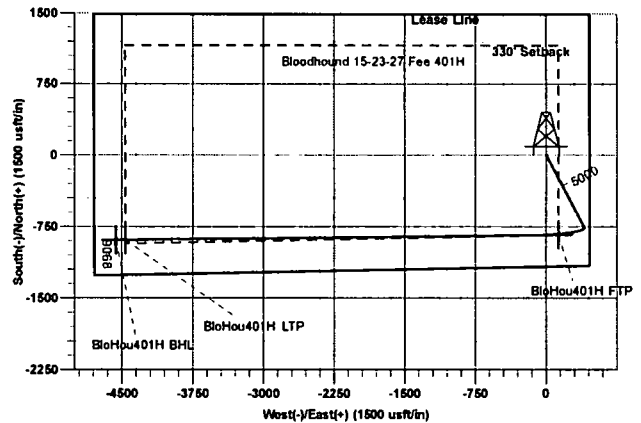
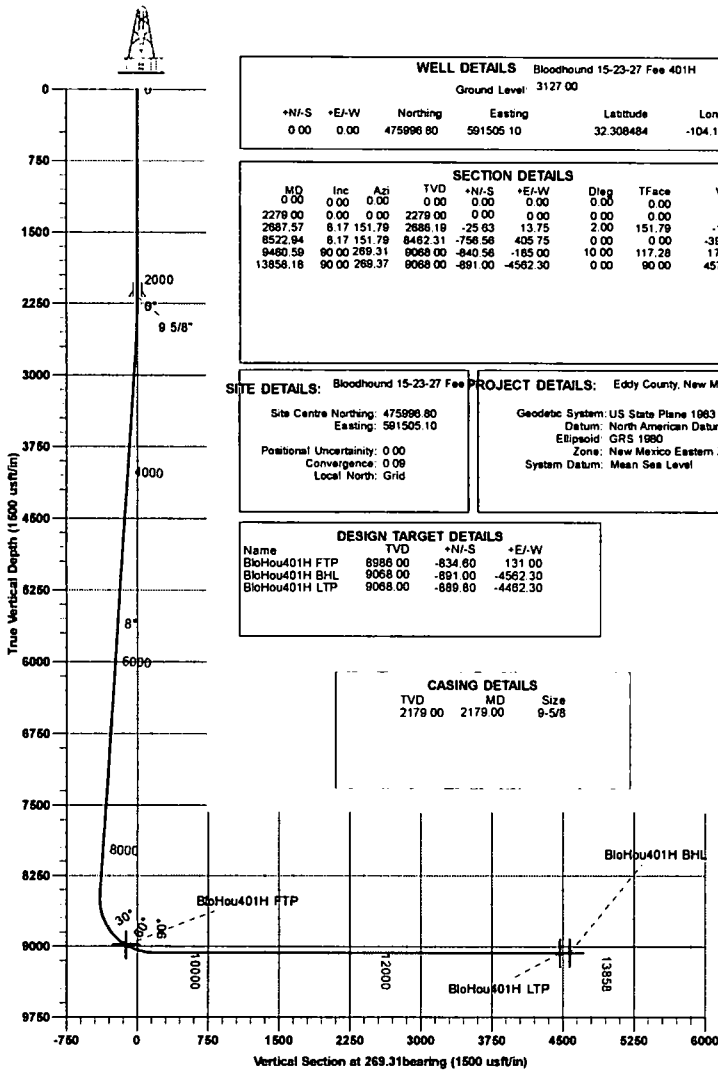
Bloodhound 15-23-27 Fee 401H
Eddy County, New Mexico (NAD 83)
Northing: 475996.80
Easting: 591505.10
Plan #3



GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)



To convert a Magnetic Direction to a Grid Direction, Add 7.18°
 To convert a True Direction to a Grid Direction, Subtract 0.09°



Scientific Drilling, Intl

Planning Report

Database: Midland District
Company: WPX Energy
Project: Eddy County, New Mexico (NAD 83)
Site: Bloodhound 15-23-27 Fee Pad
Well: Bloodhound 15-23-27 Fee 401H
Wellbore: Wellbore #1
Design: Plan #3

Local Co-ordinate Reference: Well Bloodhound 15-23-27 Fee 401H
TVD Reference: GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
MD Reference: GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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

Site Bloodhound 15-23-27 Fee Pad
Site Position: Northing: 475,996.80 usft Latitude: 32.308484
From: Map Easting: 591,505.10 usft Longitude: -104.170950
Position Uncertainty: 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: 0.09 °

Well Bloodhound 15-23-27 Fee 401H
Well Position +N/-S 0.00 usft Northing: 475,996.80 usft Latitude: 32.308484
+E/-W 0.00 usft Easting: 591,505.10 usft Longitude: -104.170950
Position Uncertainty 0.00 usft Wellhead Elevation: 0.00 usft Ground Level: 3,127.00 usft

Wellbore Wellbore #1
Magnetics Model Name Sample Date Declination Dip Angle Field Strength
 ("") ("") (nT)
 HDGM 11/26/2018 7.27 60.03 47,937

Design Plan #3
Audit Notes:
Version: Phase: PLAN Tie On Depth: 0.00
Vertical Section: Depth From (TVD) +N/-S +E/-W Direction
 (usft) (usft) (usft) (bearing)
 0.00 0.00 0.00 269.31

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	
2,279.00	0.00	0.00	2,279.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,687.57	8.17	151.79	2,686.19	-25.63	13.75	2.00	2.00	0.00	151.79	
8,522.94	8.17	151.79	8,462.31	-756.56	405.75	0.00	0.00	0.00	0.00	
9,460.59	90.00	269.31	9,068.00	-840.56	-165.00	10.00	8.73	12.53	117.28	
13,858.18	90.00	269.37	9,068.00	-891.00	-4,562.30	0.00	0.00	0.00	90.00	BloHou401H BHL

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Bloodhound 15-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Site:	Bloodhound 15-23-27 Fee Pad	North Reference:	Grid
Well:	Bloodhound 15-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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
393.00	0.00	0.00	393.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
728.00	0.00	0.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
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
2,179.00	0.00	0.00	2,179.00	0.00	0.00	0.00	0.00	0.00	0.00
Castile - 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
2,279.00	0.00	0.00	2,279.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.42	151.79	2,300.00	-0.07	0.04	-0.04	2.00	2.00	0.00
2,400.00	2.42	151.79	2,399.96	-2.25	1.21	-1.18	2.00	2.00	0.00
2,500.00	4.42	151.79	2,499.78	-7.51	4.03	-3.94	2.00	2.00	0.00
2,600.00	6.42	151.79	2,599.33	-15.83	8.49	-8.30	2.00	2.00	0.00
2,687.57	8.17	151.79	2,686.19	-25.63	13.75	-13.44	2.00	2.00	0.00
2,700.00	8.17	151.79	2,698.49	-27.19	14.58	-14.25	0.00	0.00	0.00
2,800.00	8.17	151.79	2,797.47	-39.71	21.30	-20.82	0.00	0.00	0.00
2,900.00	8.17	151.79	2,896.46	-52.24	28.02	-27.39	0.00	0.00	0.00
3,000.00	8.17	151.79	2,995.44	-64.77	34.73	-33.95	0.00	0.00	0.00
3,100.00	8.17	151.79	3,094.43	-77.29	41.45	-40.52	0.00	0.00	0.00
3,104.62	8.17	151.79	3,099.00	-77.87	41.76	-40.82	0.00	0.00	0.00
Bell Canyon (Base of Salt)									
3,158.16	8.17	151.79	3,152.00	-84.58	45.36	-44.34	0.00	0.00	0.00
Wolfcamp A									
3,200.00	8.17	151.79	3,193.41	-89.82	48.17	-47.09	0.00	0.00	0.00
3,300.00	8.17	151.79	3,292.40	-102.34	54.89	-53.65	0.00	0.00	0.00
3,400.00	8.17	151.79	3,391.38	-114.87	61.61	-60.22	0.00	0.00	0.00
3,500.00	8.17	151.79	3,490.37	-127.40	68.32	-66.78	0.00	0.00	0.00
3,600.00	8.17	151.79	3,589.35	-139.92	75.04	-73.35	0.00	0.00	0.00
3,700.00	8.17	151.79	3,688.34	-152.45	81.76	-79.92	0.00	0.00	0.00
3,800.00	8.17	151.79	3,787.32	-164.97	88.48	-86.48	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Bloodhound 15-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Site:	Bloodhound 15-23-27 Fee Pad	North Reference:	Grid
Well:	Bloodhound 15-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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)
3,900.00	8.17	151.79	3,886.31	-177.50	95.19	-93.05	0.00	0.00	0.00
4,000.00	8.17	151.79	3,985.29	-190.02	101.91	-99.62	0.00	0.00	0.00
4,024.96	8.17	151.79	4,010.00	-193.15	103.59	-101.26	0.00	0.00	0.00
Cherry Canyon									
4,100.00	8.17	151.79	4,084.28	-202.55	108.63	-106.18	0.00	0.00	0.00
4,200.00	8.17	151.79	4,183.26	-215.08	115.35	-112.75	0.00	0.00	0.00
4,300.00	8.17	151.79	4,282.25	-227.60	122.07	-119.32	0.00	0.00	0.00
4,400.00	8.17	151.79	4,381.23	-240.13	128.78	-125.88	0.00	0.00	0.00
4,500.00	8.17	151.79	4,480.22	-252.65	135.50	-132.45	0.00	0.00	0.00
4,600.00	8.17	151.79	4,579.20	-265.18	142.22	-139.02	0.00	0.00	0.00
4,700.00	8.17	151.79	4,678.18	-277.71	148.94	-145.58	0.00	0.00	0.00
4,800.00	8.17	151.79	4,777.17	-290.23	155.65	-152.15	0.00	0.00	0.00
4,900.00	8.17	151.79	4,876.15	-302.76	162.37	-158.71	0.00	0.00	0.00
5,000.00	8.17	151.79	4,975.14	-315.28	169.09	-165.28	0.00	0.00	0.00
5,100.00	8.17	151.79	5,074.12	-327.81	175.81	-171.85	0.00	0.00	0.00
5,200.00	8.17	151.79	5,173.11	-340.34	182.53	-178.41	0.00	0.00	0.00
5,300.00	8.17	151.79	5,272.09	-352.86	189.24	-184.98	0.00	0.00	0.00
5,400.00	8.17	151.79	5,371.08	-365.39	195.96	-191.55	0.00	0.00	0.00
5,500.00	8.17	151.79	5,470.06	-377.91	202.68	-198.11	0.00	0.00	0.00
5,600.00	8.17	151.79	5,569.05	-390.44	209.40	-204.68	0.00	0.00	0.00
5,650.47	8.17	151.79	5,619.00	-396.76	212.79	-207.99	0.00	0.00	0.00
Brushy Canyon									
5,700.00	8.17	151.79	5,668.03	-402.96	216.11	-211.25	0.00	0.00	0.00
5,800.00	8.17	151.79	5,767.02	-415.49	222.83	-217.81	0.00	0.00	0.00
5,900.00	8.17	151.79	5,866.00	-428.02	229.55	-224.38	0.00	0.00	0.00
5,994.96	8.17	151.79	5,960.00	-439.91	235.93	-230.61	0.00	0.00	0.00
Bone Spring									
6,000.00	8.17	151.79	5,964.99	-440.54	236.27	-230.95	0.00	0.00	0.00
6,100.00	8.17	151.79	6,063.97	-453.07	242.99	-237.51	0.00	0.00	0.00
6,200.00	8.17	151.79	6,162.96	-465.59	249.70	-244.08	0.00	0.00	0.00
6,300.00	8.17	151.79	6,261.94	-478.12	256.42	-250.64	0.00	0.00	0.00
6,400.00	8.17	151.79	6,360.92	-490.65	263.14	-257.21	0.00	0.00	0.00
6,500.00	8.17	151.79	6,459.91	-503.17	269.86	-263.78	0.00	0.00	0.00
6,600.00	8.17	151.79	6,558.89	-515.70	276.57	-270.34	0.00	0.00	0.00
6,604.15	8.17	151.79	6,563.00	-516.22	276.85	-270.62	0.00	0.00	0.00
Avalon									
6,700.00	8.17	151.79	6,657.88	-528.22	283.29	-276.91	0.00	0.00	0.00
6,800.00	8.17	151.79	6,756.86	-540.75	290.01	-283.48	0.00	0.00	0.00
6,807.21	8.17	151.79	6,764.00	-541.65	290.49	-283.95	0.00	0.00	0.00
1st Bone Spring Sand									
6,900.00	8.17	151.79	6,855.85	-553.27	296.73	-290.04	0.00	0.00	0.00
7,000.00	8.17	151.79	6,954.83	-565.80	303.45	-296.61	0.00	0.00	0.00
7,100.00	8.17	151.79	7,053.82	-578.33	310.16	-303.18	0.00	0.00	0.00
7,173.93	8.17	151.79	7,127.00	-587.59	315.13	-308.03	0.00	0.00	0.00
2nd Bone Spring Lime									
7,200.00	8.17	151.79	7,152.80	-590.85	316.88	-309.74	0.00	0.00	0.00
7,300.00	8.17	151.79	7,251.79	-603.38	323.60	-316.31	0.00	0.00	0.00
7,352.75	8.17	151.79	7,304.00	-609.99	327.14	-319.77	0.00	0.00	0.00
2nd Bone Spring Sand									
7,400.00	8.17	151.79	7,350.77	-615.90	330.32	-322.88	0.00	0.00	0.00
7,500.00	8.17	151.79	7,449.76	-628.43	337.03	-329.44	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Bloodhound 15-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Site:	Bloodhound 15-23-27 Fee Pad	North Reference:	Grid
Well:	Bloodhound 15-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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)
7,600.00	8.17	151.79	7,548.74	-640.96	343.75	-336.01	0.00	0.00	0.00
7,700.00	8.17	151.79	7,647.73	-653.48	350.47	-342.58	0.00	0.00	0.00
7,800.00	8.17	151.79	7,746.71	-666.01	357.19	-349.14	0.00	0.00	0.00
7,900.00	8.17	151.79	7,845.70	-678.53	363.91	-355.71	0.00	0.00	0.00
8,000.00	8.17	151.79	7,944.68	-691.06	370.62	-362.27	0.00	0.00	0.00
8,100.00	8.17	151.79	8,043.67	-703.58	377.34	-368.84	0.00	0.00	0.00
8,200.00	8.17	151.79	8,142.65	-716.11	384.06	-375.41	0.00	0.00	0.00
8,300.00	8.17	151.79	8,241.63	-728.64	390.78	-381.97	0.00	0.00	0.00
8,400.00	8.17	151.79	8,340.62	-741.16	397.49	-388.54	0.00	0.00	0.00
8,500.00	8.17	151.79	8,439.60	-753.69	404.21	-395.11	0.00	0.00	0.00
8,522.94	8.17	151.79	8,462.31	-756.56	405.75	-396.61	0.00	0.00	0.00
KOP									
8,550.00	7.33	170.99	8,489.13	-759.96	406.93	-397.75	10.00	-3.09	70.92
8,600.00	8.25	207.92	8,538.70	-766.29	405.75	-396.49	10.00	1.84	73.86
8,650.00	11.50	230.55	8,587.97	-772.63	400.22	-390.89	10.00	6.49	45.26
8,659.23	12.22	233.31	8,597.00	-773.80	398.73	-389.38	10.00	7.88	29.94
3rd Bone Spring Lime									
8,700.00	15.68	242.34	8,636.57	-778.94	390.38	-380.97	10.00	8.48	22.14
8,750.00	20.24	249.10	8,684.12	-785.17	376.31	-366.82	10.00	9.10	13.52
8,800.00	24.95	253.43	8,730.27	-791.26	358.11	-348.55	10.00	9.44	8.65
8,850.00	29.76	256.44	8,774.67	-797.18	335.92	-326.30	10.00	9.61	6.03
8,900.00	34.62	258.68	8,816.97	-802.88	309.91	-300.22	10.00	9.71	4.48
8,950.00	39.51	260.43	8,856.86	-808.32	280.29	-270.53	10.00	9.78	3.49
9,000.00	44.42	261.84	8,894.03	-813.45	247.27	-237.45	10.00	9.82	2.83
9,050.00	49.34	263.03	8,928.20	-818.24	211.10	-201.23	10.00	9.85	2.38
9,086.34	52.93	263.79	8,951.00	-821.48	183.00	-173.09	10.00	9.87	2.09
3rd Bone Spring Sand									
9,100.00	54.27	264.06	8,959.11	-822.64	172.06	-162.14	10.00	9.88	1.95
9,131.88	57.42	264.64	8,977.00	-825.24	145.81	-135.86	10.00	9.88	1.85
Wolfcamp Top									
9,149.88	59.21	264.96	8,986.46	-826.62	130.56	-120.59	10.00	9.89	1.74
BloHou401H FTP									
9,150.00	59.22	264.96	8,986.52	-826.63	130.45	-120.49	10.00	9.89	1.71
9,200.00	64.17	265.78	9,010.22	-830.18	86.59	-76.59	10.00	9.90	1.63
9,250.00	69.12	266.53	9,030.04	-833.25	40.81	-30.77	10.00	9.90	1.50
9,261.41	70.25	266.69	9,034.00	-833.89	30.13	-20.08	10.00	9.91	1.44
WC_X									
9,300.00	74.07	267.23	9,045.82	-835.83	-6.55	16.61	10.00	9.91	1.39
9,324.32	76.48	267.56	9,052.00	-836.90	-30.04	40.12	10.00	9.91	1.35
WC_Y									
9,350.00	79.03	267.90	9,057.45	-837.90	-55.12	65.21	10.00	9.92	1.32
9,400.00	83.99	268.54	9,064.83	-839.43	-104.53	114.63	10.00	9.92	1.29
9,450.00	88.95	269.18	9,067.90	-840.42	-154.41	164.52	10.00	9.92	1.27
9,460.59	90.00	269.31	9,068.00	-840.56	-165.00	175.11	10.00	9.92	1.26
Top Target									
9,500.00	90.00	269.31	9,068.00	-841.03	-204.41	214.52	0.00	0.00	0.00
9,600.00	90.00	269.31	9,068.00	-842.23	-304.40	314.52	0.00	0.00	0.00
9,700.00	90.00	269.31	9,068.00	-843.43	-404.39	414.52	0.00	0.00	0.00
9,800.00	90.00	269.32	9,068.00	-844.62	-504.39	514.52	0.00	0.00	0.00
9,900.00	90.00	269.32	9,068.00	-845.82	-604.38	614.52	0.00	0.00	0.00
10,000.00	90.00	269.32	9,068.00	-847.01	-704.37	714.52	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Bloodhound 15-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Site:	Bloodhound 15-23-27 Fee Pad	North Reference:	Grid
Well:	Bloodhound 15-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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)
10,100.00	90.00	269.32	9,068.00	-848.19	-804.36	814.52	0.00	0.00	0.00
10,200.00	90.00	269.32	9,068.00	-849.38	-904.36	914.52	0.00	0.00	0.00
10,300.00	90.00	269.32	9,068.00	-850.56	-1,004.35	1,014.52	0.00	0.00	0.00
10,400.00	90.00	269.32	9,068.00	-851.74	-1,104.34	1,114.52	0.00	0.00	0.00
10,500.00	90.00	269.33	9,068.00	-852.91	-1,204.34	1,214.52	0.00	0.00	0.00
10,600.00	90.00	269.33	9,068.00	-854.09	-1,304.33	1,314.52	0.00	0.00	0.00
10,700.00	90.00	269.33	9,068.00	-855.26	-1,404.32	1,414.52	0.00	0.00	0.00
10,800.00	90.00	269.33	9,068.00	-856.43	-1,504.32	1,514.52	0.00	0.00	0.00
10,900.00	90.00	269.33	9,068.00	-857.60	-1,604.31	1,614.52	0.00	0.00	0.00
11,000.00	90.00	269.33	9,068.00	-858.76	-1,704.30	1,714.52	0.00	0.00	0.00
11,100.00	90.00	269.33	9,068.00	-859.92	-1,804.30	1,814.52	0.00	0.00	0.00
11,200.00	90.00	269.34	9,068.00	-861.08	-1,904.29	1,914.52	0.00	0.00	0.00
11,300.00	90.00	269.34	9,068.00	-862.24	-2,004.28	2,014.52	0.00	0.00	0.00
11,400.00	90.00	269.34	9,068.00	-863.40	-2,104.28	2,114.52	0.00	0.00	0.00
11,500.00	90.00	269.34	9,068.00	-864.55	-2,204.27	2,214.52	0.00	0.00	0.00
11,600.00	90.00	269.34	9,068.00	-865.70	-2,304.26	2,314.52	0.00	0.00	0.00
11,700.00	90.00	269.34	9,068.00	-866.85	-2,404.26	2,414.52	0.00	0.00	0.00
11,800.00	90.00	269.34	9,068.00	-867.99	-2,504.25	2,514.52	0.00	0.00	0.00
11,900.00	90.00	269.35	9,068.00	-869.13	-2,604.24	2,614.52	0.00	0.00	0.00
12,000.00	90.00	269.35	9,068.00	-870.27	-2,704.24	2,714.52	0.00	0.00	0.00
12,100.00	90.00	269.35	9,068.00	-871.41	-2,804.23	2,814.52	0.00	0.00	0.00
12,200.00	90.00	269.35	9,068.00	-872.54	-2,904.22	2,914.52	0.00	0.00	0.00
12,300.00	90.00	269.35	9,068.00	-873.68	-3,004.22	3,014.52	0.00	0.00	0.00
12,400.00	90.00	269.35	9,068.00	-874.81	-3,104.21	3,114.52	0.00	0.00	0.00
12,500.00	90.00	269.35	9,068.00	-875.93	-3,204.20	3,214.52	0.00	0.00	0.00
12,600.00	90.00	269.36	9,068.00	-877.06	-3,304.20	3,314.52	0.00	0.00	0.00
12,700.00	90.00	269.36	9,068.00	-878.18	-3,404.19	3,414.52	0.00	0.00	0.00
12,800.00	90.00	269.36	9,068.00	-879.30	-3,504.19	3,514.52	0.00	0.00	0.00
12,900.00	90.00	269.36	9,068.00	-880.42	-3,604.18	3,614.52	0.00	0.00	0.00
13,000.00	90.00	269.36	9,068.00	-881.53	-3,704.17	3,714.52	0.00	0.00	0.00
13,100.00	90.00	269.36	9,068.00	-882.65	-3,804.17	3,814.52	0.00	0.00	0.00
13,200.00	90.00	269.36	9,068.00	-883.76	-3,904.16	3,914.52	0.00	0.00	0.00
13,300.00	90.00	269.37	9,068.00	-884.86	-4,004.15	4,014.52	0.00	0.00	0.00
13,400.00	90.00	269.37	9,068.00	-885.97	-4,104.15	4,114.52	0.00	0.00	0.00
13,500.00	90.00	269.37	9,068.00	-887.07	-4,204.14	4,214.52	0.00	0.00	0.00
13,600.00	90.00	269.37	9,068.00	-888.17	-4,304.14	4,314.52	0.00	0.00	0.00
13,700.00	90.00	269.37	9,068.00	-889.27	-4,404.13	4,414.52	0.00	0.00	0.00
13,758.17	90.00	269.37	9,068.00	-889.91	-4,462.30	4,472.69	0.00	0.00	0.00
BloHou401H LTP									
13,800.00	90.00	269.37	9,068.00	-890.36	-4,504.12	4,514.52	0.00	0.00	0.00
13,858.18	90.00	269.37	9,068.00	-891.00	-4,562.30	4,572.70	0.00	0.00	0.00
BloHou401H BHL									

Scientific Drilling, Intl

Planning Report

Database:	Midland District	Local Co-ordinate Reference:	Well Bloodhound 15-23-27 Fee 401H
Company:	WPX Energy	TVD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	GL 3127 + RKB 25 = @ 3152.00usft (O. Phoenix)
Site:	Bloodhound 15-23-27 Fee Pad	North Reference:	Grid
Well:	Bloodhound 15-23-27 Fee 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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
BloHou401H FTP - plan misses target center by 8.00usft at 9149.88usft MD (8986.46 TVD, -826.62 N, 130.56 E) - Point	0.00	0.00	8,986.00	-834.60	131.00	475,162.20	591,636.10	32.306189	-104.170531
BloHou401H LTP - plan misses target center by 0.11usft at 13758.17usft MD (9068.00 TVD, -889.91 N, -4462.30 E) - Point	0.00	0.00	9,068.00	-889.80	-4,462.30	475,107.00	587,042.80	32.306056	-104.185398
BloHou401H BHL - plan hits target center - Point	0.00	0.00	9,068.00	-891.00	-4,562.30	475,105.80	586,942.80	32.306053	-104.185722

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,179.00	2,179.00	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
393.00	393.00	Rustler			
728.00	728.00	Salado			
2,179.00	2,179.00	Castile			
3,104.62	3,099.00	Bell Canyon (Base of Salt)			
3,158.16	3,152.00	Wolfcamp A			
4,024.96	4,010.00	Cherry Canyon			
5,650.47	5,619.00	Brushy Canyon			
5,994.96	5,960.00	Bone Spring			
6,604.15	6,563.00	Avalon			
6,807.21	6,764.00	1st Bone Spring Sand			
7,173.93	7,127.00	2nd Bone Spring Lime			
7,352.75	7,304.00	2nd Bone Spring Sand			
8,659.23	8,597.00	3rd Bone Spring Lime			
9,086.34	8,951.00	3rd Bone Spring Sand			
9,131.88	8,977.00	Wolfcamp Top			
9,261.41	9,034.00	WC_X			
9,324.32	9,052.00	WC_Y			
9,460.59	9,068.00	Top Target			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,522.94	8,462.31	-756.56	405.75	KOP