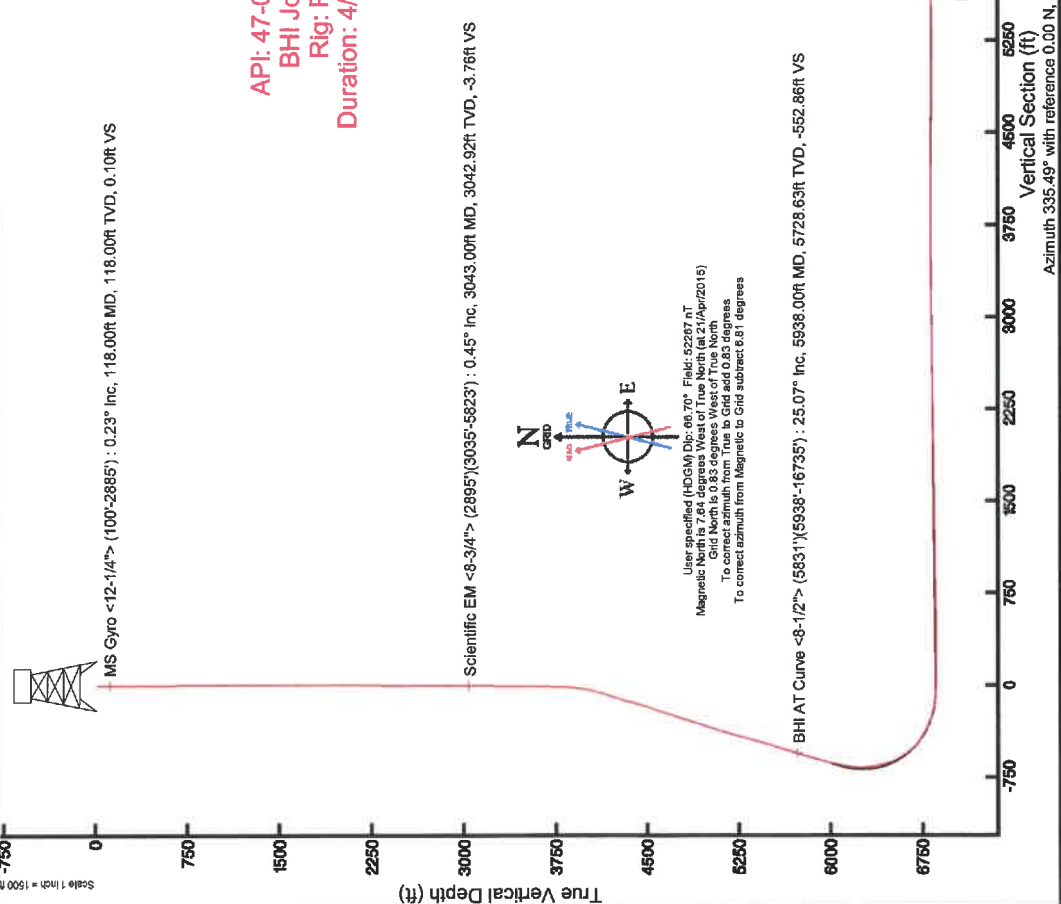


Location: Doddridge Co., WV  
 Slot: Slot C  
 Field: Doddridge  
 Well: OXF-97C-HS  
 Facility: OXF-97 Pad  
 Wellbore: OXF-97C-HS PWB

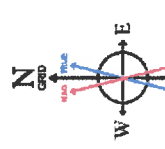
Grid reference wellpath is OXF-97C-HS PWB (Rev. 9)  
 True vertical depth are referenced to Precision 543 (RKB)  
 Measured depths are referenced to Precision 543 (RKB)  
 Precision 543 (RKB) to Mean Sea Level: 1351.47 feet  
 Mean Sea Level to Mad line (At Slot: 543 CZ -1353.47 feet  
 Coordinates are in feet, referenced to Slot C

Created by: ddwypr/cw 2015-04-28 13:29:13

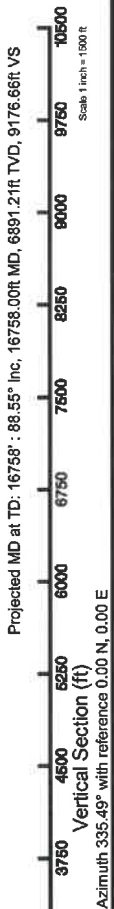
Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
OXF-97 Pad	1630092.770	298084.280	80°48'13.580"W
Slot	Local E (ft)	Local N (ft)	Longitude
Slot C	-36.09	-0.11	80°48'13.974"W
Precision 543 (RKB) to Mad line (At Slot Slot C)	1351.47 ft		
Mean Sea Level to Mad line (At Slot Slot C)	-1333.47 ft		
Precision 543 (RKB) to Mean Sea Level	1351.47 ft		



API: 47-017-06483-0000  
 BHI Job #: 7196446  
 Rig: Precision 543  
 Duration: 4/24/2015-4/28/2015



User specified (HDGM) Dip: 66.70° Field: 52287 nT  
 Magnetic North is 7.84 degrees West of True North (at 21/Apr/2015)  
 Grid North is 0.83 degrees West of True North  
 To correct azimuth from Magnetic to Grid subtract 8.81 degrees





# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## REPORT SETUP INFORMATION

Projection System	NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Edsaryar
Scale	0.999964	Report Generated	06/May/2015 at 10:52
Convergence at slot	0.83° West	Database/Source file	WellArchitectEasternDB/OXF-97C-HS_AWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [ft]	East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Location	-39.99	-0.11	1630662.66	269624.29	39°13'58.508"N	80°48'13.974"W
Facility Reference Pt			1630662.77	269664.28	39°13'58.904"N	80°48'13.980"W
Field Reference Pt			609601.22	0.00	38°23'48.753"N	84°21'09.765"W

## WELLPATH DATUM

Calculation method	Minimum curvature	Precision 543 (RKB) to Facility Vertical Datum	1351.47ft
Horizontal Reference Pt	Slot	Precision 543 (RKB) to Mean Sea Level	1351.47ft
Vertical Reference Pt	Precision 543 (RKB)	Precision 543 (RKB) to Mud Line at Slot (Slot C)	18.00ft
MD Reference Pt	Precision 543 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	335.49°



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	36.160	0.00	0.00	0.00	0.00	1630662.66	269624.29	39°13'58.508"N	80°48'13.974"W	0.00	0.000	0.00	0.00	0.00
18.00	0.000	36.160	18.00	0.00	0.00	0.00	1630662.66	269624.29	39°13'58.508"N	80°48'13.974"W	0.00	0.000	0.00	0.00	0.00
118.00	0.230	36.160	118.00	0.10	0.16	0.12	1630662.78	269624.45	39°13'58.510"N	80°48'13.973"W	0.20	36.160	0.23	0.23	0.00
218.00	0.190	30.430	218.00	0.29	0.47	0.32	1630662.98	269624.76	39°13'58.513"N	80°48'13.970"W	0.57	34.486	0.05	-0.04	-5.73
318.00	0.200	3.340	318.00	0.54	0.78	0.41	1630663.07	269625.07	39°13'58.516"N	80°48'13.969"W	0.89	27.885	0.09	0.01	-27.09
418.00	0.290	58.810	418.00	0.73	1.09	0.64	1630663.30	269625.38	39°13'58.519"N	80°48'13.966"W	1.26	30.494	0.24	0.09	55.47
518.00	0.160	64.540	518.00	0.76	1.28	0.98	1630663.64	269625.57	39°13'58.521"N	80°48'13.962"W	1.62	37.543	0.13	-0.13	5.73
618.00	0.080	355.080	618.00	0.83	1.41	1.10	1630663.76	269625.70	39°13'58.523"N	80°48'13.961"W	1.79	38.063	0.15	-0.08	-69.46
718.00	0.120	347.000	718.00	0.99	1.58	1.07	1630663.73	269625.87	39°13'58.524"N	80°48'13.961"W	1.91	34.193	0.04	0.04	-8.08
818.00	0.160	298.880	818.00	1.21	1.75	0.93	1630663.59	269626.04	39°13'58.526"N	80°48'13.963"W	1.98	27.942	0.12	0.04	-48.12
918.00	0.150	359.820	918.00	1.44	1.95	0.81	1630663.47	269626.24	39°13'58.528"N	80°48'13.965"W	2.11	22.467	0.16	-0.01	60.94
1018.00	0.120	22.740	1018.00	1.63	2.18	0.85	1630663.51	269626.47	39°13'58.530"N	80°48'13.964"W	2.34	21.243	0.06	-0.03	22.92
1118.00	0.240	13.430	1118.00	1.87	2.48	0.94	1630663.60	269626.77	39°13'58.533"N	80°48'13.963"W	2.65	20.686	0.12	0.12	-9.31
1218.00	0.180	6.910	1217.99	2.17	2.84	1.00	1630663.66	269627.13	39°13'58.537"N	80°48'13.962"W	3.01	19.470	0.06	-0.06	-6.52
1318.00	0.220	18.810	1317.99	2.44	3.17	1.08	1630663.74	269627.46	39°13'58.540"N	80°48'13.961"W	3.35	18.849	0.06	0.04	11.90
1418.00	0.300	24.190	1417.99	2.75	3.60	1.25	1630663.91	269627.89	39°13'58.544"N	80°48'13.959"W	3.81	19.214	0.08	0.08	5.38
1518.00	0.410	31.770	1517.99	3.12	4.14	1.55	1630664.21	269628.43	39°13'58.550"N	80°48'13.955"W	4.42	20.517	0.12	0.11	7.58
1618.00	0.390	61.180	1617.99	3.35	4.61	2.04	1630664.70	269628.90	39°13'58.554"N	80°48'13.949"W	5.04	23.836	0.20	-0.02	29.41
1718.00	0.440	86.360	1717.99	3.24	4.79	2.72	1630665.38	269629.08	39°13'58.556"N	80°48'13.941"W	5.51	29.534	0.19	0.05	25.18
1818.00	0.630	105.160	1817.98	2.75	4.68	3.63	1630666.29	269628.97	39°13'58.555"N	80°48'13.929"W	5.92	37.828	0.26	0.19	18.80
1918.00	0.700	103.140	1917.98	2.02	4.39	4.76	1630667.42	269628.68	39°13'58.553"N	80°48'13.915"W	6.47	47.272	0.07	0.07	-2.02
2018.00	0.600	80.400	2017.97	1.52	4.34	5.87	1630668.53	269628.63	39°13'58.552"N	80°48'13.901"W	7.30	53.500	0.27	-0.10	-22.74
2118.00	0.450	70.140	2117.96	1.35	4.56	6.75	1630669.41	269628.85	39°13'58.555"N	80°48'13.889"W	8.15	55.957	0.18	-0.15	-10.26
2218.00	0.300	83.300	2217.96	1.24	4.73	7.38	1630670.04	269629.02	39°13'58.556"N	80°48'13.881"W	8.77	57.372	0.17	-0.15	13.16
2318.00	0.290	131.670	2317.96	0.93	4.59	7.83	1630670.49	269628.88	39°13'58.555"N	80°48'13.876"W	9.08	59.633	0.24	-0.01	48.37
2418.00	0.360	142.320	2417.96	0.39	4.17	8.21	1630670.87	269628.46	39°13'58.551"N	80°48'13.871"W	9.21	63.071	0.09	0.07	10.65
2518.00	0.520	145.700	2517.96	-0.36	3.55	8.66	1630671.32	269627.84	39°13'58.545"N	80°48'13.865"W	9.36	67.721	0.16	0.16	3.38
2618.00	0.520	148.190	2617.95	-1.26	2.79	9.15	1630671.81	269627.08	39°13'58.537"N	80°48'13.859"W	9.57	73.065	0.02	0.00	2.49
2718.00	0.530	145.140	2717.95	-2.17	2.02	9.66	1630672.32	269626.31	39°13'58.530"N	80°48'13.852"W	9.87	78.174	0.03	0.01	-3.05
2818.00	0.600	142.240	2817.94	-3.13	1.23	10.24	1630672.90	269625.52	39°13'58.522"N	80°48'13.844"W	10.32	83.159	0.08	0.07	-2.90



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
2903.00	1.130	234.570	2902.94	-3.72	0.39	9.83	1630672.49	269624.68	39°13'58.514"N	80°48'13.850"W	9.84	87.722	1.53	0.62	108.62
3043.00	0.450	269.660	3042.92	-3.76	-0.41	8.16	1630670.82	269623.88	39°13'58.506"N	80°48'13.871"W	8.17	92.894	0.57	-0.49	25.06
3073.00	0.460	302.410	3072.92	-3.61	-0.35	7.94	1630670.60	269623.94	39°13'58.506"N	80°48'13.873"W	7.95	92.514	0.86	0.03	109.17
3104.00	0.380	262.740	3103.92	-3.48	-0.29	7.73	1630670.39	269624.00	39°13'58.507"N	80°48'13.876"W	7.74	92.184	0.95	-0.26	-127.97
3134.00	0.300	220.840	3133.92	-3.48	-0.37	7.58	1630670.24	269623.92	39°13'58.506"N	80°48'13.878"W	7.59	92.770	0.85	-0.27	-139.67
3164.00	0.240	226.510	3163.92	-3.53	-0.47	7.48	1630670.14	269623.82	39°13'58.505"N	80°48'13.879"W	7.50	93.590	0.22	-0.20	18.90
3194.00	0.450	194.800	3193.92	-3.64	-0.63	7.41	1630670.07	269623.66	39°13'58.503"N	80°48'13.880"W	7.44	94.835	0.92	0.70	-105.70
3225.00	0.620	189.830	3224.92	-3.88	-0.91	7.35	1630670.01	269623.38	39°13'58.501"N	80°48'13.881"W	7.41	97.056	0.57	0.55	-16.03
3255.00	1.170	192.940	3254.91	-4.25	-1.37	7.25	1630669.91	269622.92	39°13'58.496"N	80°48'13.882"W	7.38	100.682	1.84	1.83	10.37
3285.00	1.000	188.090	3284.91	-4.72	-1.93	7.15	1630669.81	269622.36	39°13'58.490"N	80°48'13.883"W	7.40	105.079	0.64	-0.57	-16.17
3315.00	0.850	204.800	3314.91	-5.08	-2.39	7.02	1630669.68	269621.90	39°13'58.486"N	80°48'13.885"W	7.41	108.786	1.02	-0.50	55.70
3346.00	0.440	213.260	3345.90	-5.30	-2.70	6.86	1630669.52	269621.59	39°13'58.483"N	80°48'13.887"W	7.37	111.462	1.35	-1.32	27.29
3376.00	0.540	205.960	3375.90	-5.45	-2.92	6.73	1630669.39	269621.37	39°13'58.481"N	80°48'13.888"W	7.34	113.443	0.39	0.33	-24.33
3406.00	0.360	220.080	3405.90	-5.58	-3.12	6.61	1630669.27	269621.17	39°13'58.479"N	80°48'13.890"W	7.31	115.259	0.70	-0.60	47.07
3436.00	0.470	202.430	3435.90	-5.70	-3.30	6.50	1630669.16	269620.99	39°13'58.477"N	80°48'13.891"W	7.29	116.941	0.56	0.37	-58.83
3466.00	0.610	175.730	3465.90	-5.94	-3.58	6.47	1630669.13	269620.71	39°13'58.474"N	80°48'13.892"W	7.39	118.952	0.95	0.47	-89.00
3497.00	0.760	161.730	3496.90	-6.30	-3.94	6.54	1630669.20	269620.35	39°13'58.471"N	80°48'13.891"W	7.64	121.036	0.72	0.48	-45.16
3527.00	0.810	156.110	3526.89	-6.71	-4.32	6.69	1630669.35	269619.97	39°13'58.467"N	80°48'13.889"W	7.96	122.846	0.31	0.17	-18.73
3557.00	1.030	164.560	3556.89	-7.18	-4.77	6.85	1630669.51	269619.52	39°13'58.462"N	80°48'13.887"W	8.35	124.877	0.86	0.73	28.17
3587.00	0.830	160.340	3586.89	-7.67	-5.24	6.99	1630669.65	269619.05	39°13'58.458"N	80°48'13.885"W	8.74	126.833	0.70	-0.67	-14.07
3618.00	0.880	178.250	3617.88	-8.11	-5.69	7.08	1630669.74	269618.60	39°13'58.453"N	80°48'13.883"W	9.08	128.790	0.87	0.16	57.77
3648.00	0.650	169.650	3647.88	-8.49	-6.08	7.11	1630669.77	269618.21	39°13'58.449"N	80°48'13.883"W	9.36	130.544	0.85	-0.77	-28.67
3678.00	0.790	185.750	3677.88	-8.83	-6.46	7.12	1630669.78	269617.83	39°13'58.446"N	80°48'13.883"W	9.61	132.195	0.82	0.47	53.67
3708.00	0.770	188.030	3707.88	-9.18	-6.86	7.07	1630669.73	269617.43	39°13'58.442"N	80°48'13.883"W	9.86	134.132	0.12	-0.07	7.60
3739.00	1.540	198.930	3738.87	-9.66	-7.46	6.91	1630669.57	269616.83	39°13'58.436"N	80°48'13.885"W	10.17	137.205	2.57	2.48	35.16
3769.00	2.500	197.970	3768.85	-10.43	-8.47	6.58	1630669.24	269615.82	39°13'58.426"N	80°48'13.889"W	10.72	142.160	3.20	3.20	-3.20
3799.00	3.640	204.470	3798.81	-11.54	-9.96	5.98	1630668.64	269614.33	39°13'58.411"N	80°48'13.897"W	11.61	149.006	3.97	3.80	21.67
3829.00	5.130	203.500	3828.72	-13.06	-12.05	5.05	1630667.71	269612.24	39°13'58.390"N	80°48'13.908"W	13.07	157.261	4.97	4.97	-3.23
3859.00	6.680	206.820	3858.56	-15.05	-14.84	3.73	1630666.39	269609.45	39°13'58.362"N	80°48'13.924"W	15.30	165.893	5.29	5.17	11.07
3890.00	8.290	208.150	3889.29	-17.53	-18.42	1.86	1630664.52	269605.87	39°13'58.327"N	80°48'13.947"W	18.51	174.229	5.22	5.19	4.29



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS A WB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
3920.00	10.010	209.330	3918.91	-20.38	-22.60	-0.44	1630662.22	269601.69	39°13'58.285"N	80°48'13.976"W	22.60	181.106	5.77	5.73	3.93
3950.00	11.860	209.160	3948.36	-23.75	-27.57	-3.22	1630659.44	269596.72	39°13'58.236"N	80°48'14.010"W	27.75	186.654	6.17	6.17	-0.57
3980.00	13.830	207.840	3977.61	-27.77	-33.43	-6.39	1630656.27	269590.86	39°13'58.177"N	80°48'14.049"W	34.04	190.826	6.64	6.57	-4.40
4010.00	15.780	205.720	4006.61	-32.57	-40.28	-9.84	1630652.82	269584.02	39°13'58.109"N	80°48'14.092"W	41.46	193.726	6.75	6.50	-7.07
4041.00	17.900	204.370	4036.28	-38.40	-48.41	-13.63	1630649.03	269575.88	39°13'58.028"N	80°48'14.139"W	50.30	195.727	6.95	6.84	-4.35
4071.00	20.100	203.830	4064.65	-44.85	-57.33	-17.62	1630645.04	269566.96	39°13'57.939"N	80°48'14.188"W	59.98	197.083	7.36	7.33	-1.80
4101.00	22.260	203.860	4092.62	-52.06	-67.24	-22.00	1630640.66	269557.05	39°13'57.841"N	80°48'14.242"W	70.75	198.117	7.20	7.20	0.10
4131.00	24.310	204.000	4120.17	-59.92	-78.08	-26.81	1630635.85	269546.21	39°13'57.733"N	80°48'14.301"W	82.56	198.951	6.84	6.83	0.47
4161.00	26.210	204.480	4147.30	-68.36	-89.75	-32.07	1630630.59	269534.54	39°13'57.617"N	80°48'14.365"W	95.31	199.661	6.37	6.33	1.60
4192.00	28.120	205.920	4174.88	-77.51	-102.56	-38.10	1630624.56	269521.74	39°13'57.489"N	80°48'14.440"W	109.40	200.380	6.52	6.16	4.65
4222.00	28.190	206.390	4201.33	-86.48	-115.26	-44.34	1630618.32	269509.03	39°13'57.363"N	80°48'14.517"W	123.50	201.041	0.78	0.23	1.57
4253.00	27.770	207.490	4228.71	-95.55	-128.23	-50.93	1630611.73	269496.07	39°13'57.234"N	80°48'14.598"W	137.97	201.661	2.15	-1.35	3.55
4283.00	27.180	206.620	4255.33	-104.15	-140.55	-57.22	1630605.44	269483.74	39°13'57.111"N	80°48'14.676"W	151.76	202.153	2.38	-1.97	-2.90
4316.00	26.690	207.600	4284.75	-113.43	-153.86	-64.03	1630598.63	269470.44	39°13'56.979"N	80°48'14.760"W	166.65	202.596	2.00	-1.48	2.97
4347.00	26.730	210.810	4312.44	-121.67	-166.02	-70.83	1630591.83	269458.28	39°13'56.858"N	80°48'14.844"W	180.50	203.105	4.66	0.13	10.35
4377.00	26.920	214.100	4339.21	-129.05	-177.44	-78.09	1630584.57	269446.86	39°13'56.744"N	80°48'14.934"W	193.86	203.755	4.99	0.63	10.97
4407.00	27.240	218.120	4365.93	-135.74	-188.46	-86.14	1630576.52	269435.83	39°13'56.634"N	80°48'15.034"W	207.22	204.564	6.19	1.07	13.40
4437.00	27.980	216.330	4392.51	-142.33	-199.53	-94.55	1630568.12	269424.76	39°13'56.523"N	80°48'15.139"W	220.80	205.354	3.71	2.47	-5.97
4468.00	29.000	216.330	4419.76	-149.53	-211.45	-103.31	1630559.36	269412.85	39°13'56.404"N	80°48'15.248"W	235.33	206.039	3.29	3.29	0.00
4498.00	29.660	214.140	4445.91	-156.94	-223.45	-111.78	1630550.88	269400.85	39°13'56.284"N	80°48'15.354"W	249.85	206.577	4.20	2.20	-7.30
4528.00	29.160	212.260	4472.05	-164.81	-235.77	-119.85	1630542.81	269388.53	39°13'56.161"N	80°48'15.454"W	264.49	206.946	3.50	-1.67	-6.27
4558.00	28.990	209.990	4498.27	-173.03	-248.25	-127.39	1630535.28	269376.05	39°13'56.037"N	80°48'15.547"W	279.03	207.164	3.72	-0.57	-7.57
4589.00	28.750	206.920	4525.42	-182.05	-261.41	-134.52	1630528.15	269362.89	39°13'55.915"N	80°48'15.635"W	293.99	207.230	4.84	-0.77	-9.90
4619.00	28.430	205.700	4551.76	-191.11	-274.27	-140.88	1630521.79	269350.03	39°13'55.778"N	80°48'15.714"W	308.34	207.187	2.22	-1.07	-4.07
4649.00	28.120	205.170	4578.18	-200.26	-287.11	-146.98	1630515.68	269337.19	39°13'55.650"N	80°48'15.789"W	322.54	207.110	1.33	-1.03	-1.77
4679.00	27.770	205.610	4604.68	-209.31	-299.81	-153.01	1630509.65	269324.49	39°13'55.524"N	80°48'15.863"W	336.60	207.038	1.35	-1.17	1.47
4709.00	27.050	207.360	4631.31	-218.01	-312.17	-159.17	1630503.50	269312.13	39°13'55.401"N	80°48'15.939"W	350.40	207.016	3.60	-2.40	5.83
4739.00	26.690	207.130	4658.07	-226.40	-324.22	-165.37	1630497.29	269300.08	39°13'55.281"N	80°48'16.016"W	363.96	207.024	1.25	-1.20	-0.77
4770.00	26.720	207.130	4685.77	-235.05	-336.62	-171.73	1630490.94	269287.68	39°13'55.157"N	80°48'16.094"W	377.90	207.028	0.10	0.10	0.00
4800.00	27.680	206.730	4712.45	-243.60	-348.85	-177.94	1630484.73	269275.46	39°13'55.035"N	80°48'16.171"W	391.61	207.025	3.26	3.20	-1.33



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
4830.00	27.690	206.250	4739.01	-252.37	-361.32	-184.15	1630478.51	269262.98	39°13'54.911"N	80°48'16.248"W	405.55	207.006	0.74	0.03	-1.60
4860.00	27.330	205.470	4765.62	-261.20	-373.79	-190.20	1630472.47	269250.51	39°13'54.787"N	80°48'16.322"W	419.40	206.969	1.70	-1.20	-2.60
4891.00	26.980	205.340	4793.21	-270.32	-386.57	-196.27	1630466.40	269237.73	39°13'54.660"N	80°48'16.397"W	433.54	206.918	1.15	-1.13	-0.42
4921.00	26.450	206.000	4820.00	-278.95	-398.73	-202.11	1630460.56	269225.58	39°13'54.539"N	80°48'16.469"W	447.03	206.880	2.02	-1.77	2.20
4951.00	25.640	206.680	4846.96	-287.27	-410.53	-207.95	1630454.71	269213.77	39°13'54.421"N	80°48'16.541"W	460.20	206.864	2.88	-2.70	2.27
4981.00	25.520	206.500	4874.02	-295.40	-422.12	-213.75	1630448.92	269202.19	39°13'54.306"N	80°48'16.613"W	473.15	206.857	0.48	-0.40	-0.60
5012.00	26.290	206.100	4901.90	-303.96	-434.26	-219.75	1630442.92	269190.05	39°13'54.185"N	80°48'16.687"W	486.69	206.841	2.55	2.48	-1.29
5042.00	26.530	206.130	4928.77	-312.43	-446.24	-225.62	1630437.04	269178.07	39°13'54.066"N	80°48'16.759"W	500.04	206.822	0.80	0.80	0.10
5072.00	27.760	206.470	4955.46	-321.07	-458.51	-231.69	1630430.98	269165.80	39°13'53.944"N	80°48'16.834"W	513.72	206.808	4.13	4.10	1.13
5132.00	29.020	207.510	5008.25	-338.83	-483.93	-244.64	1630418.03	269140.38	39°13'53.691"N	80°48'16.994"W	542.25	206.818	2.26	2.10	1.73
5166.00	28.650	207.550	5038.03	-348.92	-498.47	-252.22	1630410.45	269125.84	39°13'53.546"N	80°48'17.087"W	558.65	206.839	1.09	-1.09	0.12
5226.00	27.980	208.640	5090.85	-366.20	-523.57	-265.62	1630397.05	269100.74	39°13'53.296"N	80°48'17.253"W	587.10	206.900	1.41	-1.12	1.82
5286.00	26.980	209.800	5144.08	-382.58	-547.74	-279.13	1630383.54	269076.57	39°13'53.055"N	80°48'17.420"W	614.76	207.004	1.89	-1.67	1.93
5347.00	26.500	208.220	5198.56	-398.90	-571.74	-292.44	1630370.23	269052.58	39°13'52.816"N	80°48'17.585"W	642.19	207.090	1.41	-0.79	-2.59
5407.00	26.520	211.060	5252.25	-414.58	-595.01	-305.68	1630356.99	269029.31	39°13'52.584"N	80°48'17.749"W	668.94	207.192	2.11	0.03	4.73
5468.00	26.730	210.360	5306.79	-430.17	-618.51	-319.64	1630343.03	269005.80	39°13'52.350"N	80°48'17.922"W	696.22	207.330	0.62	0.34	-1.15
5528.00	25.990	210.620	5360.55	-445.45	-641.47	-333.16	1630329.51	268982.85	39°13'52.121"N	80°48'18.089"W	722.82	207.446	1.25	-1.23	0.43
5588.00	25.980	210.540	5414.48	-460.50	-664.10	-346.53	1630316.14	268960.22	39°13'51.896"N	80°48'18.255"W	749.08	207.556	0.06	-0.02	-0.13
5649.00	26.370	210.980	5469.23	-475.83	-687.22	-360.30	1630302.38	268937.09	39°13'51.665"N	80°48'18.426"W	775.94	207.667	0.71	0.64	0.72
5710.00	26.360	210.070	5523.88	-491.35	-710.56	-374.06	1630288.62	268913.76	39°13'51.433"N	80°48'18.596"W	803.00	207.763	0.66	-0.02	-1.49
5770.00	26.610	208.200	5577.59	-507.21	-733.93	-387.08	1630275.60	268890.39	39°13'51.200"N	80°48'18.757"W	829.75	207.808	1.45	0.42	-3.12
5831.00	26.290	207.390	5632.20	-523.82	-757.96	-399.75	1630262.93	268866.36	39°13'50.960"N	80°48'18.914"W	856.92	207.807	0.79	-0.52	-1.33
5938.00	25.070	206.010	5728.63	-552.86	-799.38	-420.59	1630242.08	268842.95	39°13'50.548"N	80°48'19.171"W	903.27	207.751	1.27	-1.14	-0.29
6027.00	25.140	205.490	5809.22	-577.00	-833.39	-437.00	1630225.68	268790.94	39°13'50.210"N	80°48'19.373"W	941.01	207.671	0.26	0.08	-0.58
6117.00	26.160	207.790	5890.35	-601.42	-868.20	-454.48	1630208.20	268756.13	39°13'49.863"N	80°48'19.589"W	979.96	207.631	1.58	1.13	2.56
6206.00	26.080	214.740	5970.28	-623.43	-901.64	-474.78	1630187.90	268722.69	39°13'49.530"N	80°48'19.841"W	1019.00	207.770	3.44	-0.09	7.81
6296.00	23.400	216.750	6052.02	-642.14	-932.22	-496.75	1630165.93	268692.11	39°13'49.224"N	80°48'20.114"W	1056.31	208.052	3.12	-2.98	2.23
6385.00	23.670	220.700	6133.62	-658.13	-959.93	-518.97	1630143.71	268664.40	39°13'48.947"N	80°48'20.392"W	1091.23	208.397	1.80	0.30	4.44
6475.00	23.580	239.160	6216.19	-667.70	-982.88	-546.25	1630116.43	268641.45	39°13'48.716"N	80°48'20.734"W	1124.47	209.064	8.19	-0.10	20.51
6564.00	23.800	253.020	6297.75	-667.31	-997.26	-578.73	1630083.95	268627.06	39°13'48.570"N	80°48'21.144"W	1153.02	210.127	6.25	0.25	15.57



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
6654.00	23.540	273.230	6380.32	-656.55	-1001.56	-614.10	1630048.58	268622.77	39°13'48.522"N	80°48'21.593"W	1174.84	211.514	8.98	-0.29	22.46
6743.00	26.360	287.200	6461.08	-635.11	-994.71	-650.76	1630011.92	268629.62	39°13'48.585"N	80°48'22.060"W	1188.67	213.194	7.32	3.17	15.70
6833.00	32.240	297.520	6539.58	-602.84	-977.68	-691.20	1629971.49	268646.64	39°13'48.747"N	80°48'22.577"W	1197.34	215.259	8.59	6.53	11.47
6922.00	39.210	306.320	6611.84	-559.48	-950.00	-735.00	1629927.69	268674.33	39°13'49.014"N	80°48'23.138"W	1201.14	217.729	9.71	7.83	9.89
7012.00	46.620	316.810	6677.79	-503.50	-909.19	-780.43	1629882.26	268715.13	39°13'49.411"N	80°48'23.723"W	1198.21	220.642	11.41	8.23	11.66
7101.00	55.680	324.560	6733.61	-436.58	-855.51	-824.01	1629838.68	268768.81	39°13'49.935"N	80°48'24.287"W	1187.81	223.925	12.22	10.18	8.71
7191.00	62.870	326.190	6779.56	-360.46	-791.87	-867.90	1629794.79	268832.45	39°13'50.558"N	80°48'24.856"W	1174.86	227.623	8.14	7.99	1.81
7281.00	70.660	325.910	6815.04	-278.94	-723.32	-914.06	1629748.64	268901.00	39°13'51.229"N	80°48'25.456"W	1165.63	231.644	8.66	8.66	-0.31
7370.00	77.370	328.710	6839.54	-194.31	-651.34	-960.21	1629702.49	268972.97	39°13'51.933"N	80°48'26.055"W	1160.28	235.849	8.12	7.54	3.15
7460.00	83.370	330.820	6854.59	-106.06	-574.72	-1004.85	1629657.85	269049.60	39°13'52.684"N	80°48'26.637"W	1157.59	240.233	7.06	6.67	2.34
7549.00	89.660	333.280	6860.00	-17.44	-496.28	-1046.46	1629616.24	269128.02	39°13'53.453"N	80°48'27.180"W	1158.18	244.627	7.59	7.07	2.76
7639.00	89.630	335.300	6860.56	72.54	-415.20	-1085.50	1629577.20	269209.11	39°13'54.249"N	80°48'27.691"W	1162.20	249.068	2.24	-0.03	2.24
7728.00	89.660	336.890	6861.11	161.53	-333.84	-1121.56	1629541.14	269290.46	39°13'55.048"N	80°48'28.164"W	1170.19	253.424	1.79	0.03	1.79
7818.00	90.280	339.450	6861.16	251.42	-250.30	-1155.03	1629507.68	269374.00	39°13'55.869"N	80°48'28.605"W	1181.84	257.773	2.93	0.69	2.84
7909.00	89.850	337.640	6861.05	342.29	-165.61	-1188.31	1629474.40	269458.69	39°13'56.701"N	80°48'29.043"W	1199.79	262.066	2.04	-0.47	-1.99
7997.00	90.280	334.700	6860.95	430.27	-85.12	-1223.86	1629438.85	269539.17	39°13'57.491"N	80°48'29.510"W	1226.82	266.021	3.38	0.49	-3.34
8087.00	90.060	334.500	6860.69	520.26	-3.82	-1262.46	1629400.24	269620.47	39°13'58.289"N	80°48'30.016"W	1262.47	269.827	0.33	-0.24	-0.22
8176.00	91.020	332.390	6859.85	609.19	75.78	-1302.25	1629360.46	269700.07	39°13'59.070"N	80°48'30.536"W	1304.45	273.330	2.60	1.08	-2.37
8266.00	91.110	327.940	6858.17	698.77	153.82	-1347.00	1629315.71	269778.10	39°13'59.835"N	80°48'31.119"W	1355.76	276.515	4.94	0.10	-4.94
8355.00	91.170	329.350	6856.40	787.11	229.80	-1393.30	1629269.41	269854.09	39°14'00.579"N	80°48'31.722"W	1412.13	279.366	1.59	0.07	1.58
8444.00	91.140	334.210	6854.61	875.88	308.19	-1435.37	1629227.35	269932.46	39°14'01.348"N	80°48'32.271"W	1468.08	282.118	5.46	-0.03	5.46
8534.00	90.770	333.050	6853.11	965.82	388.81	-1475.33	1629187.38	270013.08	39°14'02.139"N	80°48'32.793"W	1525.71	284.764	1.35	-0.41	-1.29
8624.00	90.650	336.620	6851.99	1055.79	470.25	-1513.60	1629149.12	270094.52	39°14'02.938"N	80°48'33.295"W	1584.96	287.259	3.97	-0.13	3.97
8713.00	90.620	338.850	6851.01	1144.71	552.60	-1547.31	1629115.41	270176.87	39°14'03.747"N	80°48'33.738"W	1643.03	289.653	2.51	-0.03	2.51
8802.00	90.680	340.780	6850.00	1233.45	636.13	-1578.02	1629084.70	270260.39	39°14'04.568"N	80°48'34.144"W	1701.41	291.955	2.17	0.07	2.17
8892.00	90.740	341.460	6848.88	1323.01	721.28	-1607.14	1629055.58	270345.54	39°14'05.406"N	80°48'34.530"W	1761.57	294.170	0.76	0.07	0.76
8981.00	90.830	341.270	6847.66	1411.53	805.60	-1635.58	1629027.15	270429.86	39°14'06.235"N	80°48'34.907"W	1823.21	296.223	0.24	0.10	-0.21
9071.00	90.710	340.770	6846.45	1501.10	890.70	-1664.84	1628997.88	270514.96	39°14'07.072"N	80°48'35.294"W	1888.14	298.147	0.57	-0.13	-0.56
9160.00	90.680	338.720	6845.37	1589.85	974.19	-1695.65	1628967.07	270598.44	39°14'07.892"N	80°48'35.701"W	1955.58	299.878	2.30	-0.03	-2.30
9249.00	91.020	337.110	6844.05	1678.75	1056.65	-1729.11	1628933.62	270680.90	39°14'08.702"N	80°48'36.142"W	2026.41	301.429	1.85	0.38	-1.81



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
9339.00	90.980	336.400	6842.48	1768.72	1139.33	-1764.62	1628898.10	270763.57	39°14'09.514"N	80°48'36.608"W	2100.47	302.848	0.79	-0.04	-0.79
9428.00	90.740	333.500	6841.14	1857.69	1219.94	-1802.30	1628860.43	270844.18	39°14'10.306"N	80°48'37.102"W	2176.36	304.093	3.27	-0.27	-3.26
9518.00	90.680	336.090	6840.03	1947.67	1301.36	-1840.62	1628822.11	270925.60	39°14'11.105"N	80°48'37.604"W	2254.20	305.261	2.88	-0.07	2.88
9608.00	90.950	336.240	6838.75	2037.66	1383.67	-1876.99	1628785.75	271007.91	39°14'11.913"N	80°48'38.082"W	2331.87	306.397	0.34	0.30	0.17
9697.00	91.080	334.150	6837.17	2126.64	1464.44	-1914.32	1628748.42	271088.68	39°14'12.706"N	80°48'38.571"W	2410.23	307.416	2.35	0.15	-2.35
9787.00	90.800	332.800	6835.70	2216.57	1544.96	-1954.50	1628708.23	271169.19	39°14'13.496"N	80°48'39.097"W	2491.38	308.325	1.53	-0.31	-1.50
9876.00	90.830	333.220	6834.43	2305.48	1624.25	-1994.89	1628667.85	271248.48	39°14'14.274"N	80°48'39.624"W	2572.51	309.153	0.47	0.03	0.47
9966.00	90.890	334.220	6833.08	2395.42	1704.94	-2034.73	1628628.00	271329.17	39°14'15.065"N	80°48'40.146"W	2654.61	309.960	1.11	0.07	1.11
10055.00	91.080	334.210	6831.55	2484.39	1785.07	-2073.44	1628589.30	271409.29	39°14'15.852"N	80°48'40.653"W	2735.99	310.726	0.21	0.21	-0.01
10145.00	90.770	332.160	6830.10	2574.30	1865.38	-2114.03	1628548.71	271489.60	39°14'16.639"N	80°48'41.183"W	2819.36	311.424	2.30	-0.34	-2.28
10235.00	90.890	327.890	6828.79	2663.86	1943.31	-2158.99	1628503.76	271567.53	39°14'17.403"N	80°48'41.769"W	2904.77	311.991	4.75	0.13	-4.74
10324.00	90.830	329.890	6827.46	2752.25	2019.50	-2204.96	1628457.78	271643.71	39°14'18.149"N	80°48'42.367"W	2990.02	312.486	2.25	-0.07	2.25
10414.00	90.920	334.740	6826.08	2842.08	2099.16	-2246.76	1628415.98	271723.37	39°14'18.931"N	80°48'42.913"W	3074.80	313.055	5.39	0.10	5.39
10503.00	90.800	335.290	6824.74	2931.06	2179.82	-2284.35	1628378.40	271804.03	39°14'19.722"N	80°48'43.406"W	3157.51	313.659	0.63	-0.13	0.62
10592.00	90.980	340.940	6823.36	3019.92	2262.37	-2317.50	1628345.24	271886.57	39°14'20.533"N	80°48'43.843"W	3238.69	314.310	6.35	0.20	6.35
10682.00	90.920	337.930	6821.87	3109.69	2346.61	-2349.11	1628313.64	271970.81	39°14'21.361"N	80°48'44.260"W	3320.38	314.969	3.34	-0.07	-3.34
10771.00	91.050	336.610	6820.34	3198.63	2428.68	-2383.49	1628279.26	272052.88	39°14'22.168"N	80°48'44.712"W	3402.87	315.538	1.49	0.15	-1.48
10861.00	90.340	339.830	6819.25	3288.51	2512.24	-2416.88	1628245.87	272136.44	39°14'22.989"N	80°48'45.152"W	3486.07	316.108	3.66	-0.79	3.58
10950.00	90.520	339.920	6818.58	3377.25	2595.81	-2447.50	1628215.25	272220.00	39°14'23.810"N	80°48'45.557"W	3567.70	316.684	0.23	0.20	0.10
11040.00	90.220	340.730	6818.00	3466.92	2680.55	-2477.80	1628184.95	272304.74	39°14'24.643"N	80°48'45.957"W	3650.32	317.251	0.96	-0.33	0.90
11130.00	90.310	340.250	6817.58	3556.58	2765.38	-2507.86	1628154.90	272389.57	39°14'25.477"N	80°48'46.355"W	3733.19	317.796	0.54	0.10	-0.53
11219.00	90.090	336.180	6817.27	3645.46	2848.01	-2540.88	1628121.87	272472.19	39°14'26.289"N	80°48'46.790"W	3816.70	318.262	4.58	-0.25	-4.57
11309.00	90.220	338.250	6817.03	3735.41	2930.98	-2575.74	1628087.02	272555.16	39°14'27.104"N	80°48'47.248"W	3901.93	318.691	2.30	0.14	2.30
11398.00	89.660	337.220	6817.12	3824.34	3013.34	-2609.46	1628053.30	272637.52	39°14'27.913"N	80°48'47.692"W	3986.16	319.108	1.32	-0.63	-1.16
11488.00	89.600	330.220	6817.70	3914.24	3093.99	-2649.28	1628013.48	272718.16	39°14'28.704"N	80°48'48.213"W	4073.26	319.428	7.78	-0.07	-7.78
11578.00	89.660	329.040	6818.28	4003.77	3171.63	-2694.78	1627967.98	272795.80	39°14'29.465"N	80°48'48.806"W	4161.86	319.647	1.31	0.07	-1.31
11667.00	89.780	328.650	6818.72	4092.17	3247.80	-2740.82	1627921.94	272871.96	39°14'30.211"N	80°48'49.405"W	4249.74	319.839	0.46	0.13	-0.44
11756.00	89.540	332.200	6819.25	4180.81	3325.19	-2784.74	1627878.02	272949.35	39°14'30.970"N	80°48'49.978"W	4337.24	320.055	4.00	-0.27	3.99
11846.00	89.450	334.210	6820.04	4270.73	3405.52	-2825.31	1627837.46	273029.68	39°14'31.758"N	80°48'50.508"W	4424.92	320.320	2.24	-0.10	2.23
11935.00	89.080	334.260	6821.18	4359.70	3485.66	-2863.99	1627798.77	273109.82	39°14'32.544"N	80°48'51.015"W	4511.35	320.592	0.42	-0.42	0.06





# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
12025.00	89.260	334.950	6822.49	4449.68	3566.96	-2902.59	1627760.18	273191.11	39°14'33.342"N	80°48'51.520"W	4598.72	320.863	0.79	0.20	0.77
12115.00	88.920	336.930	6823.91	4539.66	3649.12	-2939.27	1627723.50	273273.27	39°14'34.149"N	80°48'52.002"W	4685.66	321.149	2.23	-0.38	2.20
12204.00	89.850	336.180	6824.87	4628.64	3730.77	-2974.68	1627688.09	273354.92	39°14'34.950"N	80°48'52.467"W	4771.51	321.433	1.34	1.04	-0.84
12293.00	89.630	336.830	6825.27	4717.62	3812.39	-3010.16	1627652.61	273436.53	39°14'35.752"N	80°48'52.933"W	4857.51	321.706	0.77	-0.25	0.73
12383.00	89.970	337.780	6825.59	4807.57	3895.42	-3044.88	1627617.89	273519.56	39°14'36.567"N	80°48'53.390"W	4944.25	321.987	1.12	0.38	1.06
12473.00	89.820	338.830	6825.75	4897.46	3979.04	-3078.15	1627584.62	273603.18	39°14'37.389"N	80°48'53.828"W	5030.69	322.275	1.18	-0.17	1.17
12562.00	90.120	336.090	6825.80	4986.40	4061.23	-3112.27	1627550.51	273685.37	39°14'38.196"N	80°48'54.277"W	5116.62	322.536	3.10	0.34	-3.08
12652.00	90.150	335.540	6825.59	5076.40	4143.33	-3149.14	1627513.64	273767.47	39°14'39.002"N	80°48'54.761"W	5204.26	322.763	0.61	0.03	-0.61
12741.00	89.940	332.900	6825.52	5165.37	4223.47	-3187.84	1627474.94	273847.60	39°14'39.789"N	80°48'55.268"W	5291.51	322.955	2.98	-0.24	-2.97
12831.00	90.150	335.650	6825.45	5255.34	4304.54	-3226.90	1627435.88	273928.67	39°14'40.584"N	80°48'55.779"W	5379.78	323.143	3.06	0.23	3.06
12920.00	90.220	336.470	6825.16	5344.34	4385.88	-3263.02	1627399.77	274010.01	39°14'41.383"N	80°48'56.253"W	5466.56	323.351	0.92	0.08	0.92
13010.00	90.120	339.130	6824.89	5434.25	4469.20	-3297.02	1627365.76	274093.32	39°14'42.201"N	80°48'56.701"W	5553.75	323.583	2.96	-0.11	2.96
13099.00	90.150	338.820	6824.68	5523.09	4552.28	-3328.95	1627333.84	274176.40	39°14'43.018"N	80°48'57.122"W	5639.61	323.823	0.35	0.03	-0.35
13189.00	90.180	340.080	6824.42	5612.87	4636.55	-3360.54	1627302.24	274260.66	39°14'43.846"N	80°48'57.540"W	5726.33	324.066	1.40	0.03	1.40
13279.00	89.970	339.110	6824.31	5702.64	4720.90	-3391.92	1627270.87	274345.01	39°14'44.675"N	80°48'57.954"W	5813.09	324.303	1.10	-0.23	-1.08
13368.00	90.060	334.130	6824.28	5791.60	4802.57	-3427.23	1627235.56	274426.68	39°14'45.477"N	80°48'58.418"W	5900.05	324.487	5.60	0.10	-5.60
13458.00	90.090	335.820	6824.16	5881.59	4884.12	-3465.30	1627197.49	274508.22	39°14'46.278"N	80°48'58.917"W	5988.56	324.644	1.88	0.03	1.88
13547.00	90.220	334.000	6823.92	5970.58	4964.71	-3503.04	1627159.76	274588.82	39°14'47.069"N	80°48'59.412"W	6076.15	324.794	2.05	0.15	-2.04
13637.00	89.420	332.790	6824.21	6060.52	5045.18	-3543.34	1627119.46	274669.28	39°14'47.858"N	80°48'59.939"W	6165.15	324.919	1.61	-0.89	-1.34
13727.00	88.980	332.340	6825.46	6150.39	5125.05	-3584.80	1627077.99	274749.15	39°14'48.641"N	80°49'00.481"W	6254.36	325.029	0.70	-0.49	-0.50
13816.00	88.490	330.960	6827.43	6239.17	5203.36	-3627.05	1627035.75	274827.45	39°14'49.409"N	80°49'01.032"W	6342.75	325.121	1.65	-0.55	-1.55
13906.00	88.490	330.540	6829.80	6328.83	5281.85	-3671.01	1626991.79	274905.94	39°14'50.179"N	80°49'01.606"W	6432.29	325.200	0.47	0.00	-0.47
13995.00	88.370	333.800	6832.84	6417.63	5360.52	-3712.54	1626950.26	274984.61	39°14'50.950"N	80°49'02.148"W	6520.59	325.295	3.66	-0.13	3.66
14085.00	88.280	334.630	6834.87	6507.57	5441.57	-3751.67	1626911.13	275065.61	39°14'51.745"N	80°49'02.661"W	6609.48	325.416	0.93	-0.10	0.92
14174.00	88.220	333.350	6837.59	6596.50	5521.47	-3790.68	1626872.12	275145.55	39°14'52.529"N	80°49'03.171"W	6697.46	325.529	1.44	-0.07	-1.44
14264.00	88.430	335.340	6840.22	6686.44	5602.56	-3829.63	1626833.17	275226.64	39°14'53.325"N	80°49'03.681"W	6786.36	325.645	2.22	0.23	2.21
14353.00	88.650	338.240	6842.49	6775.37	5684.32	-3864.69	1626798.12	275308.40	39°14'54.128"N	80°49'04.142"W	6873.67	325.789	3.27	0.25	3.26
14443.00	88.740	336.790	6844.54	6865.29	5767.45	-3899.10	1626763.71	275391.53	39°14'54.945"N	80°49'04.595"W	6961.79	325.939	1.61	0.10	-1.61
14532.00	88.710	338.390	6846.52	6954.21	5849.71	-3933.02	1626729.79	275473.78	39°14'55.753"N	80°49'05.041"W	7048.95	326.085	1.80	-0.03	1.80
14621.00	88.680	341.570	6848.54	7042.90	5933.30	-3963.48	1626699.33	275557.37	39°14'56.574"N	80°49'05.444"W	7135.35	326.257	3.57	-0.03	3.57



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## WELLPATH DATA (235 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
14711.00	88.740	340.630	6850.57	7132.45	6018.43	-3992.62	1626670.19	275642.49	39°14'57.41"N	80°49'05.830"W	7222.36	326.440	1.05	0.07	-1.04
14801.00	88.740	339.170	6852.55	7222.16	6102.92	-4023.54	1626639.27	275726.98	39°14'58.242"N	80°49'06.239"W	7309.89	326.604	1.62	0.00	-1.62
14890.00	88.980	334.000	6854.32	7311.09	6184.55	-4038.89	1626603.92	275808.60	39°14'59.043"N	80°49'06.704"W	7397.52	326.723	5.81	0.27	-5.81
14980.00	89.170	329.310	6855.78	7400.85	6263.72	-4101.61	1626561.21	275887.78	39°14'59.820"N	80°49'07.261"W	7487.15	326.782	5.21	0.21	-5.21
15069.00	89.350	327.550	6856.92	7489.17	6339.54	-4148.19	1626514.62	275963.59	39°15'00.562"N	80°49'07.868"W	7576.10	326.802	1.99	0.20	-1.98
15159.00	89.380	333.500	6857.92	7578.78	6417.85	-4192.46	1626470.36	276041.90	39°15'01.330"N	80°49'08.445"W	7665.87	326.845	6.61	0.03	6.61
15248.00	89.260	336.170	6858.98	7667.76	6498.39	-4230.29	1626432.53	276122.44	39°15'02.120"N	80°49'08.941"W	7754.00	326.937	3.00	-0.13	3.00
15338.00	89.320	334.610	6860.09	7757.75	6580.21	-4267.77	1626395.05	276204.25	39°15'02.923"N	80°49'09.432"W	7843.02	327.034	1.73	0.07	-1.73
15427.00	88.890	337.180	6861.49	7846.73	6661.43	-4304.11	1626358.71	276285.47	39°15'03.721"N	80°49'09.910"W	7930.96	327.133	2.93	-0.48	2.89
15517.00	89.080	338.190	6863.08	7936.65	6744.68	-4338.28	1626324.55	276368.71	39°15'04.538"N	80°49'10.359"W	8019.44	327.250	1.14	0.21	1.12
15606.00	89.230	338.010	6864.39	8025.55	6827.25	-4371.47	1626291.35	276451.28	39°15'05.350"N	80°49'10.797"W	8106.85	327.369	0.26	0.17	-0.20
15695.00	89.110	336.780	6865.68	8114.49	6909.40	-4405.68	1626257.15	276533.43	39°15'06.157"N	80°49'11.247"W	8194.50	327.477	1.39	-0.13	-1.38
15785.00	89.020	335.930	6867.15	8204.47	6991.83	-4441.77	1626221.06	276615.86	39°15'06.966"N	80°49'11.721"W	8283.42	327.573	0.95	-0.10	-0.94
15874.00	89.080	333.060	6868.63	8293.43	7072.14	-4480.08	1626182.75	276696.16	39°15'07.754"N	80°49'12.223"W	8371.75	327.646	3.22	0.07	-3.22
15964.00	88.580	336.590	6870.46	8383.39	7153.56	-4518.35	1626144.48	276777.58	39°15'08.553"N	80°49'12.724"W	8461.02	327.723	3.96	-0.56	3.92
16053.00	88.460	338.470	6872.76	8472.30	7235.77	-4552.35	1626110.48	276859.79	39°15'09.361"N	80°49'13.172"W	8548.70	327.824	2.12	-0.13	2.11
16143.00	88.520	334.900	6875.14	8562.24	7318.38	-4587.96	1626074.88	276942.39	39°15'10.172"N	80°49'13.640"W	8637.59	327.916	3.97	0.07	-3.97
16232.00	88.490	332.560	6877.46	8651.16	7398.16	-4627.33	1626035.50	277022.17	39°15'10.955"N	80°49'14.155"W	8726.10	327.975	2.63	-0.03	-2.63
16322.00	88.620	333.910	6879.73	8741.06	7478.49	-4667.85	1625994.99	277102.49	39°15'11.743"N	80°49'14.685"W	8815.70	328.029	1.51	0.14	1.50
16411.00	88.490	334.880	6881.97	8830.01	7558.72	-4706.30	1625956.54	277182.72	39°15'12.530"N	80°49'15.189"W	8904.13	328.092	1.10	-0.15	1.09
16501.00	88.460	335.960	6884.37	8919.98	7640.53	-4743.72	1625919.12	277264.53	39°15'13.333"N	80°49'15.680"W	8993.37	328.165	1.20	-0.03	1.20
16590.00	88.400	335.710	6886.81	9008.94	7721.70	-4780.14	1625882.70	277345.70	39°15'14.130"N	80°49'16.158"W	9081.54	328.240	0.29	-0.07	-0.28
16680.00	88.520	332.290	6889.23	9098.87	7802.55	-4819.57	1625843.27	277426.55	39°15'14.923"N	80°49'16.674"W	9171.05	328.297	3.80	0.13	-3.80
16735.00	88.550	331.250	6890.63	9153.73	7851.00	-4845.58	1625817.26	277474.99	39°15'15.398"N	80°49'17.014"W	9225.93	328.317	1.89	0.05	-1.89
16758.00	88.550	331.250	6891.21	9176.66	7871.15	-4856.64	1625806.20	277495.15	39°15'15.596"N	80°49'17.158"W	9248.89	328.325	0.00	0.00	0.00



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
OXF-97C-HS LP Rev-2		6858.00	-517.95	-1027.99	1629634.71	269106.36	39°13'53.242"N	80°48'26.941"W	point
OXF-97C-HS BHL Rev-2		6887.00	7853.03	-4844.62	1625818.22	277477.02	39°15'15.418"N	80°49'17.002"W	point
OXF-97 LL		7198.47	39.99	0.11	1630662.77	269664.28	39°13'58.904"N	80°48'13.980"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: OXF-97C-HS AWB Ref Wellpath: OXF-97C-HS AWP Proj: 16758'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	2903.00	Generic gyro - northseeking (Standard)	01_MS Gyro <12-1/4"> (100'-2885')	OXF-97C-HS AWB
2903.00	5831.00	ISWWSA MWD, Rev. 2 (Standard)	02_Scientific EM <8-3/4"> (2895')(3035'-5823')	OXF-97C-HS AWB
5831.00	16735.00	NaviTrak (AT Curve Short Spaced)	03_BHI AT Curve <8-1/2"> (5831')(5938'-16735')	OXF-97C-HS AWB
16735.00	16758.00	Blind Drilling (std)	Projection to bit	OXF-97C-HS AWB



# Actual Wellpath Report

OXF-97C-HS AWP Proj: 16758'  
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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot C
Area	Doddridge Co., WV	Well	OXF-97C-HS
Field	Doddridge	Wellbore	OXF-97C-HS AWB
Facility	OXF-97 Pad		

## COMMENTS

Wellpath general comments  
 API: 47-017-06483-0000  
 BHI Job #: 7196446  
 Rig: Precision 543  
 Duration: 4/24/2015-4/28/2015  
 MS Gyro <12-1/4"> (100'-2885')  
 Scientific EM <8-3/4"> (2895')(3035'-5823')  
 BHI AT Curve <8-1/2"> (5831')(5938'-16735')  
 Projected MD at TD: 16758'