



# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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REFERENCE WELLPATH IDENTIFICATION	
Operator	NOBLE ENERGY
Area	Doddridge Co., WV
Field	Doddridge
Facility	OXF-97 Pad
Slot	OXF-97D-HS
Well	OXF-97D-HS AWB
Wellbore	

REPORT SETUP INFORMATION	
Projection System	NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
North Reference	Grid
Scale	0.999964
Convergence at slot	0.83° West
Software System	WellArchitect® 4.0.1
User	Edsaryar
Report Generated	12/May/2015 at 16:51
Database/Source file	WellArchitectEasternDB/OXF-97D-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	-60.02	-0.06	1630662.71	269604.26	39°13'58.311"N	80°48'13.970"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
Horizontal Reference Pt	Slot
Vertical Reference Pt	Precision 543 (RKB)
Vertical Reference Pt	Precision 543 (RKB)
Vertical Reference Pt	Mean Sea Level
Section Origin	Precision 543 (RKB) to Facility Vertical Datum
Section Azimuth	Precision 543 (RKB) to Mean Sea Level
	Precision 543 (RKB) to Mud Line at Slot (Slot D)
	Section Origin
	Section Azimuth
	N 0.00, E 0.00 ft
	335.49°

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May 17 2015  
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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
408.00	0.00	69.010	0.00	0.00	0.00	0.00	1630662.71	269604.26	39°13'58.311"N	80°48'13.970"W	0.00	0.000	0.00	0.00	0.00
18.00	0.000	69.010	18.00	0.00	0.00	0.00	1630662.71	269604.26	39°13'58.311"N	80°48'13.970"W	0.00	0.000	0.00	0.00	0.00
108.00	0.160	69.010	108.00	-0.01	0.05	0.12	1630662.83	269604.31	39°13'58.311"N	80°48'13.969"W	0.13	69.010	0.18	0.18	0.00
208.00	0.090	345.770	208.00	0.06	0.17	0.23	1630662.94	269604.43	39°13'58.312"N	80°48'13.967"W	0.29	53.150	0.17	-0.07	-83.24
348.00	0.130	236.340	348.00	0.10	0.17	0.23	1630663.04	269604.44	39°13'58.312"N	80°48'13.966"W	0.31	36.334	0.14	0.14	-18.74
408.00	0.440	147.640	408.00	-0.32	-0.23	0.25	1630662.96	269604.03	39°13'58.308"N	80°48'13.967"W	0.34	133.019	0.43	0.31	-78.70
508.00	0.450	99.100	508.00	-0.91	-0.62	0.84	1630663.55	269603.64	39°13'58.305"N	80°48'13.959"W	1.05	126.317	0.37	0.01	-48.54
608.00	0.420	36.420	607.99	-0.95	-0.39	1.45	1630664.16	269603.87	39°13'58.307"N	80°48'13.952"W	1.50	104.965	0.45	-0.03	-62.68
708.00	0.550	12.210	707.99	-0.39	0.38	1.77	1630664.48	269604.64	39°13'58.315"N	80°48'13.948"W	1.81	77.973	0.24	0.13	-24.21
808.00	0.230	32.610	807.99	0.54	1.52	2.03	1630664.74	269605.78	39°13'58.326"N	80°48'13.945"W	2.54	53.256	0.13	-0.06	26.32
1008.00	0.590	85.490	1007.98	0.47	1.73	2.65	1630665.36	269605.99	39°13'58.328"N	80°48'13.937"W	3.17	56.946	0.49	0.36	52.88
1108.00	0.690	72.160	1107.98	0.22	1.95	3.74	1630666.45	269606.21	39°13'58.330"N	80°48'13.923"W	4.22	62.440	0.18	0.10	-13.33
1208.00	0.790	57.130	1207.97	0.25	2.51	4.89	1630667.60	269606.77	39°13'58.336"N	80°48'13.908"W	5.50	62.835	0.22	0.10	-15.03
1308.00	0.890	45.430	1307.96	0.41	3.27	6.03	1630668.74	269607.33	39°13'58.343"N	80°48'13.893"W	6.84	61.429	0.20	0.11	-1.71
1408.00	0.770	47.150	1407.95	0.80	4.11	7.09	1630669.80	269608.37	39°13'58.352"N	80°48'13.881"W	8.19	59.856	0.11	-0.01	-8.27
1508.00	0.930	43.600	1507.95	1.16	4.84	7.84	1630670.55	269609.10	39°13'58.360"N	80°48'13.871"W	9.21	58.283	0.34	-0.34	-3.55
1608.00	0.970	97.700	1607.94	1.12	5.07	8.42	1630671.13	269609.33	39°13'58.362"N	80°48'13.864"W	9.83	58.924	0.37	-0.06	54.10
1708.00	0.830	105.520	1707.94	0.54	4.86	9.35	1630672.06	269609.12	39°13'58.360"N	80°48'13.852"W	10.54	62.543	0.37	0.36	7.82
1808.00	0.720	111.340	1807.93	0.41	4.41	10.01	1630672.84	269608.91	39°13'58.357"N	80°48'13.843"W	11.34	61.518	0.26	0.14	0.82
1908.00	0.620	109.720	1907.92	-1.46	3.89	12.05	1630674.76	269608.15	39°13'58.351"N	80°48'13.818"W	12.66	72.113	0.06	-0.05	-1.82
2008.00	0.560	89.610	2007.91	-2.16	3.65	13.21	1630675.92	269607.91	39°13'58.349"N	80°48'13.803"W	13.71	74.553	0.35	-0.26	-20.11
2108.00	0.460	71.920	2107.91	-2.38	3.72	13.92	1630676.63	269607.98	39°13'58.349"N	80°48'13.794"W	14.41	75.016	0.32	-0.30	-17.69
2208.00	0.320	80.460	2207.91	-2.46	3.83	14.31	1630677.02	269608.09	39°13'58.350"N	80°48'13.789"W	14.81	75.036	0.06	-0.05	8.54
2308.00	0.230	143.250	2307.91	-3.08	3.38	14.83	1630677.54	269607.64	39°13'58.346"N	80°48'13.782"W	15.21	77.164	0.31	0.31	-3.72
2408.00	0.400	158.880	2407.90	-3.79	2.75	15.18	1630677.89	269607.01	39°13'58.340"N	80°48'13.778"W	15.43	79.721	0.12	-0.03	15.63
2508.00	0.370	140.330	2507.90	-4.45	2.18	15.51	1630678.22	269606.44	39°13'58.334"N	80°48'13.773"W	15.67	82.005	0.13	-0.03	-18.55
2708.00	0.380	108.560	2707.90	-4.99	1.82	16.03	1630678.74	269606.08	39°13'58.331"N	80°48'13.767"W	16.14	83.507	0.21	0.01	-31.77
2808.00	0.150	14.000	2807.90	0.24	1.73	16.40	1630679.17	269605.72	39°13'58.330"N	80°48'13.761"W	16.43	83.507	0.21	0.01	-31.77

Environmental Protection 01/27/2017





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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
2987.00	0.090	240.140	2907.90	-5.26	1.74	16.50	1630679.21	269606.00	39°13'58.330"N	80°48'13.761"W	16.59	83.979	0.22	-0.04	165.45
2987.00	0.560	202.800	2986.90	-5.53	1.35	16.30	1630679.01	269605.61	39°13'58.326"N	80°48'13.763"W	16.35	85.252	0.62	0.59	-47.27
3039.00	0.500	326.430	3038.89	-5.48	1.31	16.07	1630678.78	269605.57	39°13'58.326"N	80°48'13.766"W	16.13	85.347	1.80	-0.12	237.75
3070.00	0.270	69.140	3069.89	-5.35	1.45	16.07	1630678.78	269605.71	39°13'58.327"N	80°48'13.766"W	16.13	84.854	1.99	-0.74	331.32
3130.00	1.280	159.630	3129.89	-5.81	1.09	16.39	1630679.10	269605.35	39°13'58.324"N	80°48'13.762"W	16.43	86.185	3.63	3.27	150.67
3160.00	2.310	158.040	3159.88	-6.74	0.22	16.73	1630679.44	269604.48	39°13'58.315"N	80°48'13.757"W	16.74	89.253	3.44	3.43	-5.30
3190.00	3.330	151.380	3189.84	-8.22	-1.11	17.38	1630680.09	269603.15	39°13'58.302"N	80°48'13.749"W	17.41	93.647	3.57	3.40	-22.20
3221.00	3.640	153.730	3220.78	-10.10	-2.78	18.24	1630680.95	269601.48	39°13'58.286"N	80°48'13.738"W	18.46	98.665	1.10	1.00	7.58
3281.00	3.710	150.800	3280.65	-14.06	-6.30	20.07	1630682.78	269597.96	39°13'58.251"N	80°48'13.714"W	21.04	107.431	0.81	-0.67	-6.93
3311.00	4.000	155.090	3310.58	-16.07	-8.10	20.99	1630683.70	269596.16	39°13'58.234"N	80°48'13.702"W	22.49	111.101	1.36	0.97	14.30
3341.00	4.490	150.320	3340.50	-18.29	-10.07	22.01	1630684.72	269594.19	39°13'58.214"N	80°48'13.689"W	24.20	114.582	2.01	1.63	-15.90
3372.00	4.540	152.080	3371.40	-20.72	-12.21	23.18	1630685.89	269592.05	39°13'58.193"N	80°48'13.673"W	26.20	117.766	0.48	0.16	5.68
3432.00	4.640	149.870	3431.21	-25.54	-16.47	25.44	1630688.15	269587.80	39°13'58.151"N	80°48'13.644"W	30.31	122.910	0.89	0.03	-10.97
3462.00	4.640	148.300	3461.11	-27.95	-18.55	26.69	1630689.40	269585.71	39°13'58.131"N	80°48'13.628"W	32.50	124.797	0.42	0.00	-5.23
3492.00	4.370	147.550	3491.02	-30.28	-20.54	27.94	1630690.65	269583.72	39°13'58.112"N	80°48'13.611"W	34.68	126.327	0.92	-0.90	-2.50
3522.00	4.390	147.060	3521.94	-32.44	-22.38	29.11	1630691.82	269581.88	39°13'58.093"N	80°48'13.596"W	36.72	127.561	2.19	-2.19	0.35
3592.00	4.640	149.870	3591.89	-35.58	-25.12	30.69	1630693.40	269579.15	39°13'58.067"N	80°48'13.575"W	39.66	129.296	1.63	-0.80	29.67
3622.00	4.570	148.780	3621.83	-36.95	-26.35	31.27	1630693.98	269577.91	39°13'58.055"N	80°48'13.568"W	40.89	130.123	0.68	-0.23	-14.17
3652.00	4.250	147.220	3651.80	-38.20	-27.45	31.88	1630694.58	269576.81	39°13'58.044"N	80°48'13.560"W	42.07	130.738	1.18	-1.07	-11.87
3682.00	4.350	147.170	3681.78	-39.27	-28.37	32.42	1630695.12	269575.89	39°13'58.035"N	80°48'13.553"W	43.08	131.196	2.65	-2.65	2.79
3752.00	4.110	146.530	3751.77	-40.95	-29.72	33.54	1630696.25	269574.33	39°13'58.027"N	80°48'13.547"W	44.81	131.334	0.72	0.00	3.07
3822.00	0.690	152.530	3857.76	-42.12	-30.61	34.39	1630697.10	269573.65	39°13'58.013"N	80°48'13.527"W	46.04	131.673	0.48	-0.24	30.66
3892.00	0.470	154.870	3947.75	-43.03	-31.43	34.80	1630697.51	269572.83	39°13'58.005"N	80°48'13.522"W	46.89	132.086	0.25	-0.24	2.60
3962.00	0.140	101.520	4038.75	-43.47	-31.79	35.07	1630697.77	269572.47	39°13'58.001"N	80°48'13.519"W	47.33	132.193	0.44	-0.36	-58.63
4131.00	0.480	246.680	4129.75	-43.53	-31.96	34.82	1630697.53	269572.30	39°13'58.000"N	80°48'13.522"W	47.27	132.544	0.66	0.37	159.52

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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
4312.00	1.180	260.030	4310.72	-42.82	-32.58	31.76	1630694.46	269571.68	39°13'57.993"N	80°48'13.561"W	45.50	135.734	0.02	0.02	-0.30
4403.00	1.030	247.930	4401.71	-42.55	-33.05	30.07	1630692.78	269571.21	39°13'57.988"N	80°48'13.582"W	44.69	137.698	0.30	-0.16	-13.30
4495.00	0.120	102.080	4493.70	-42.57	-33.38	29.40	1630692.11	269570.88	39°13'57.985"N	80°48'13.590"W	44.48	138.625	1.23	-0.99	-158.53
4586.00	0.870	56.660	4584.70	-42.52	-33.02	30.07	1630692.78	269571.24	39°13'57.989"N	80°48'13.582"W	44.66	137.675	0.87	0.82	-49.91
4677.00	1.740	149.280	4675.88	-43.15	-33.85	26.70	1630693.81	269571.63	39°13'57.982"N	80°48'13.579"W	45.28	137.092	2.70	0.82	150.43
4707.00	2.610	202.760	4705.67	-43.90	-34.61	29.93	1630692.63	269569.65	39°13'57.973"N	80°48'13.583"W	45.75	139.151	4.25	4.23	12.53
4740.00	4.160	195.470	4738.61	-45.33	-36.46	29.32	1630692.02	269567.81	39°13'57.954"N	80°48'13.591"W	46.78	141.196	4.87	4.70	-22.09
4770.00	5.360	201.050	4768.51	-47.15	-38.81	28.52	1630691.23	269565.45	39°13'57.931"N	80°48'13.600"W	48.17	143.689	4.28	4.00	18.60
4801.00	5.990	198.930	4799.36	-49.34	-41.69	27.48	1630690.19	269562.57	39°13'57.902"N	80°48'13.613"W	49.93	146.614	2.14	2.03	-6.84
4831.00	5.210	197.250	4826.81	-50.19	-44.40	24.89	1630687.31	269559.86	39°13'57.868"N	80°48'13.627"W	51.53	150.400	3.44	3.19	15.11
4923.00	11.130	202.460	4919.86	-62.53	-59.25	20.79	1630683.50	269545.01	39°13'57.728"N	80°48'13.695"W	62.79	160.667	3.25	3.20	3.18
4983.00	13.070	201.370	4978.52	-71.21	-70.92	16.10	1630678.81	269533.34	39°13'57.612"N	80°48'13.752"W	72.73	167.208	3.26	3.23	-1.82
5014.00	14.730	201.400	5008.61	-76.39	-77.86	13.39	1630676.10	269526.41	39°13'57.543"N	80°48'13.786"W	79.00	170.244	5.35	5.35	0.10
5044.00	15.870	200.360	5037.55	-81.95	-85.25	10.57	1630673.28	269519.01	39°13'57.470"N	80°48'13.820"W	85.90	172.934	3.91	3.80	-3.47
5074.00	17.900	197.570	5066.81	-88.28	-93.18	7.74	1630669.45	269511.77	39°13'57.397"N	80°48'13.854"W	91.81	175.267	1.95	1.95	6.97
5105.00	19.930	193.800	5095.58	-95.96	-103.16	5.03	1630667.74	269501.10	39°13'57.292"N	80°48'13.887"W	103.29	177.206	7.69	6.55	-12.48
5165.00	23.600	188.840	5151.30	-113.95	-124.94	0.65	1630663.36	269479.33	39°13'57.189"N	80°48'13.915"W	113.60	178.641	6.49	5.97	-7.17
5196.00	26.190	186.630	5179.42	-124.99	-137.87	-1.09	1630661.62	269466.40	39°13'56.948"N	80°48'13.959"W	124.94	179.702	7.23	6.27	-9.37
5226.00	27.870	183.130	5207.14	-136.04	-151.41	-2.41	1630659.88	269452.60	39°13'56.771"N	80°48'13.977"W	137.87	180.455	8.88	8.35	-7.13
5256.00	29.800	180.700	5232.52	-148.77	-165.57	-4.53	1630658.18	269438.69	39°13'56.674"N	80°48'13.997"W	165.63	181.568	3.99	3.77	2.77
5287.00	29.320	180.700	5259.61	-161.52	-180.51	-6.57	1630656.14	269423.75	39°13'56.526"N	80°48'14.020"W	180.63	182.085	0.71	0.71	0.06
5317.00	30.030	180.000	5285.69	-174.18	-195.23	-8.36	1630654.35	269409.03	39°13'56.380"N	80°48'14.040"W	195.41	182.451	3.90	2.70	-5.70
5377.00	29.650	186.650	5333.00	-200.06	-220.06	-11.16	1630651.55	269379.31	39°13'56.086"N	80°48'14.070"W	225.23	182.840	1.31	-0.63	-2.30
5438.00	28.830	186.650	5380.31	-216.36	-237.44	-13.03	1630649.81	269349.59	39°13'55.871"N	80°48'14.100"W	250.07	183.938	3.11	-1.18	3.62
5498.00	28.500	182.500	5433.61	-251.90	-283.25	-14.29	1630648.42	269320.91	39°13'55.508"N	80°48'14.099"W	283.72	182.887	1.35	-1.35	0.15
5529.00	28.180	182.300	5470.93	-264.88	-297.64	-15.04	1630647.67	269306.31	39°13'55.364"N	80°48'14.106"W	298.35	182.890	1.13	0.19	2.35
5559.00	27.620	180.400	5497.53	-277.29	-311.98	-16.86	1630646.85	269292.29	39°13'55.225"N	80°48'14.114"W	312.38	182.910	1.87	-1.87	0.33
5589.00	27.270	180.260	5524.12	-289.46	-325.42	-17.78	1630645.93	269278.50	39°13'55.089"N	80°48'14.123"W	326.21	182.949	1.76	-1.17	2.87
5619.00	26.800	180.100	5550.31	-301.31	-339.30	-18.65	1630645.01	269264.83	39°13'54.951"N	80°48'14.132"W	339.80	183.042	3.62	-2.19	6.63

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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 [1/100ft]	Build Rate [1/100ft]	Turn Rate [1/100ft]
5650.00	26.570	189.210	5578.58	-313.00	-353.08	-19.91	1630642.80	269251.20	39°13'54.818"N	80°48'14.158"W	353.64	183.227	4.21	-0.29	9.39
5680.00	26.980	191.680	5605.36	-324.08	-366.36	-22.36	1630640.35	269237.91	39°13'54.687"N	80°48'14.187"W	367.05	183.492	3.95	1.37	8.23
5710.00	28.100	191.860	5631.96	-335.26	-379.94	-25.19	1630637.52	269224.33	39°13'54.552"N	80°48'14.220"W	380.78	183.793	3.74	3.73	0.60
5740.00	28.630	191.450	5658.36	-346.76	-393.90	-28.07	1630634.64	269210.37	39°13'54.414"N	80°48'14.254"W	394.90	184.076	1.88	1.77	-1.37
5770.00	29.090	191.140	5684.56	-358.01	-408.27	-30.83	1630631.78	269196.41	39°13'54.277"N	80°48'14.288"W	409.31	184.333	1.40	1.42	-1.13
5800.00	30.270	189.780	5710.56	-370.88	-422.95	-33.65	1630629.06	269181.32	39°13'54.126"N	80°48'14.320"W	424.29	184.549	3.12	2.10	-4.63
5831.00	31.140	189.020	5737.21	-384.02	-438.57	-36.24	1630626.48	269165.71	39°13'53.971"N	80°48'14.350"W	440.06	184.723	3.07	2.81	-2.45
5861.00	32.130	188.090	5762.75	-397.20	-454.13	-38.57	1630624.14	269150.15	39°13'53.817"N	80°48'14.376"W	455.76	184.855	3.68	3.30	-3.10
5891.00	32.700	187.000	5788.08	-410.83	-470.07	-40.69	1630622.03	269134.21	39°13'53.659"N	80°48'14.400"W	471.83	184.947	2.72	1.90	-3.63
5921.00	32.940	185.470	5813.15	-424.66	-486.15	-42.38	1630619.11	269118.15	39°13'53.507"N	80°48'14.423"W	487.81	185.041	1.31	1.25	-1.71
5952.00	31.680	185.680	5839.60	-438.84	-502.52	-44.33	1630618.38	269101.76	39°13'53.338"N	80°48'14.441"W	504.47	185.041	3.09	-2.77	-2.55
6031.00	30.390	184.470	5907.29	-474.26	-543.08	-47.94	1630614.77	269061.20	39°13'52.936"N	80°48'14.479"W	545.19	185.044	1.81	-1.63	-1.53
6121.00	25.930	195.980	5986.68	-509.18	-584.75	-55.14	1630607.57	269019.54	39°13'52.524"N	80°48'14.563"W	587.34	185.387	7.79	-4.96	12.79
6210.00	20.800	210.140	6068.42	-533.16	-617.17	-68.45	1630594.26	268987.12	39°13'52.201"N	80°48'14.726"W	620.95	186.329	8.51	-5.76	15.91
6300.00	17.210	220.490	6133.32	-541.39	-641.18	-83.08	1630577.83	268943.12	39°13'51.780"N	80°48'15.000"W	667.83	189.071	5.32	1.74	16.35
6389.00	18.760	234.790	6238.21	-556.37	-659.48	-105.29	1630557.42	268944.81	39°13'51.778"N	80°48'15.186"W	667.83	189.071	5.32	1.74	16.35
6479.00	21.370	255.170	6322.85	-556.30	-672.04	-133.01	1630529.71	268932.25	39°13'51.650"N	80°48'15.536"W	685.07	191.195	8.24	2.90	22.64
6568.00	21.970	273.070	6405.65	-545.85	-675.30	-165.34	1630497.37	268928.99	39°13'51.613"N	80°48'15.946"W	695.24	193.758	7.43	0.67	20.11
6658.00	24.510	289.590	6488.43	-525.04	-668.13	-199.79	1630462.93	268936.16	39°13'51.679"N	80°48'16.385"W	697.36	196.648	7.74	2.82	18.36
6747.00	24.030	307.190	6565.52	-498.81	-649.04	-236.85	1630444.41	268936.25	39°13'51.717"N	80°48'16.911"W	694.81	196.245	3.71	1.17	15.84
6837.00	42.630	316.870	6636.20	-440.04	-611.68	-280.89	1630381.83	268992.60	39°13'52.225"N	80°48'17.426"W	673.09	204.665	12.98	8.89	15.24
6926.00	50.440	323.890	6697.42	-377.73	-561.86	-321.80	1630340.92	269042.42	39°13'52.712"N	80°48'17.955"W	647.49	209.801	10.47	8.78	7.89
7016.00	59.330	328.240	6749.15	-305.18	-500.78	-362.71	1630300.01	269103.50	39°13'53.309"N	80°48'18.487"W	618.34	215.916	10.64	9.88	4.83
7105.00	66.940	332.500	6789.36	-226.18	-431.79	-401.84	1630260.89	269172.48	39°13'53.986"N	80°48'18.996"W	589.85	222.942	9.55	8.55	4.79
7185.00	72.480	333.390	6820.88	-142.01	-356.91	-440.49	1630222.33	269242.92	39°13'54.728"N	80°48'19.501"W	545.80	230.984	5.71	5.80	0.44
7285.00	77.170	333.890	6844.73	-55.32	-279.35	-479.34	1630183.39	269324.92	39°13'55.481"N	80°48'20.009"W	554.80	239.767	5.78	5.68	1.11
7374.00	84.200	336.120	6859.13	32.44	-199.80	-516.41	1630146.32	269404.47	39°13'56.262"N	80°48'20.495"W	553.71	248.849	8.28	7.90	2.51
7464.00	90.460	339.780	6863.32	122.20	-116.52	-550.13	1630112.60	269487.74	39°13'57.080"N	80°48'20.939"W	562.33	258.041	8.05	6.96	4.07
7553.00	90.120	339.950	6862.87	210.94	-32.96	-580.76	1630081.97	269571.30	39°13'57.901"N	80°48'21.344"W	581.70	266.752	0.43	-0.38	0.19
7643.00	89.730	337.660	6862.87	910.79	503.89	-611.41	1630043.25	269655.14	39°13'58.723"N	80°48'21.849"W	611.55	276.162	1.80	-0.61	-0.19

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
7732.00	89.780	335.210	6863.34	389.77	132.40	-649.17	1630013.57	269736.65	39°13'59.526"N	80°48'22.243"W	662.53	281.527	2.53	0.03	-2.53
7822.00	89.850	334.970	6863.63	479.77	214.02	-687.08	1629975.66	269818.27	39°14'00.327"N	80°48'22.740"W	719.64	287.302	0.28	0.08	-0.27
7911.00	89.780	333.120	6863.92	568.74	294.04	-726.03	1629936.71	269898.29	39°14'01.112"N	80°48'23.250"W	783.31	292.048	2.08	-0.08	-2.08
8001.00	89.850	333.620	6864.21	658.68	374.49	-766.37	1629896.37	269978.74	39°14'01.902"N	80°48'23.777"W	852.97	296.043	0.56	0.08	0.56
8091.00	89.820	333.360	6864.47	748.64	456.22	-804.04	1629858.74	270058.46	39°14'02.704"N	80°48'24.294"W	924.46	299.311	3.63	-0.03	3.63
8180.00	89.850	333.020	6864.73	837.64	536.83	-841.72	1629821.03	270141.07	39°14'03.495"N	80°48'24.765"W	998.33	302.529	4.34	0.03	-4.34
8270.00	89.940	334.970	6864.89	927.61	617.71	-881.17	1629781.57	270221.95	39°14'04.289"N	80°48'25.281"W	1076.12	305.031	2.17	0.10	2.17
8359.00	89.910	334.660	6865.01	1016.60	698.25	-919.05	1629743.70	270302.49	39°14'05.079"N	80°48'25.777"W	1154.21	307.226	0.35	-0.03	-0.35
8449.00	90.770	336.430	6864.47	1106.59	780.17	-956.30	1629706.44	270384.40	39°14'05.883"N	80°48'26.266"W	1234.17	309.208	2.19	0.96	1.97
8538.00	90.650	336.000	6863.57	1195.32	862.45	-994.17	1629672.44	270465.72	39°14'06.677"N	80°48'26.751"W	1314.46	311.660	2.81	0.13	2.81
8628.00	90.650	340.500	6862.35	1285.26	946.90	-1021.30	1629641.45	270551.13	39°14'07.522"N	80°48'27.123"W	1392.72	312.835	1.74	0.00	1.74
8717.00	90.620	339.950	6861.36	1373.95	1030.65	-1051.41	1629611.34	270634.87	39°14'08.345"N	80°48'27.521"W	1472.31	314.429	0.62	-0.03	-0.62
8806.00	90.580	339.190	6860.43	1462.72	1114.04	-1082.47	1629580.28	270718.26	39°14'09.165"N	80°48'27.931"W	1553.33	315.824	0.86	-0.04	-0.85
8896.00	90.770	339.950	6859.37	1552.49	1198.38	-1113.88	1629548.87	270802.59	39°14'09.994"N	80°48'28.346"W	1636.11	317.093	0.87	0.21	0.84
8985.00	91.170	337.150	6856.21	1731.00	1365.95	-1176.67	1629486.09	270970.16	39°14'11.641"N	80°48'29.175"W	1802.87	319.257	3.59	0.13	-3.59
9164.00	90.980	336.120	6854.54	1819.97	1447.63	-1211.96	1629450.80	271051.84	39°14'12.443"N	80°48'29.638"W	1887.98	320.064	1.18	-0.21	-1.16
9253.00	91.020	330.520	6852.99	1908.86	1527.11	-1251.90	1629410.86	271131.32	39°14'13.223"N	80°48'30.160"W	1974.67	320.656	6.29	0.04	-6.29
9343.00	91.410	327.280	6851.08	1998.23	1604.15	-1298.37	1629364.39	271208.35	39°14'13.977"N	80°48'30.765"W	2063.75	321.014	3.63	0.43	-3.60
9432.00	91.460	327.900	6849.64	2088.46	1674.96	-1346.34	1629310.80	271285.35	39°14'14.711"N	80°48'31.399"W	2153.70	321.455	3.14	1.08	0.74
9522.00	91.420	328.750	6846.56	2175.52	1755.42	-1393.96	1629268.81	271359.61	39°14'15.459"N	80°48'32.008"W	2241.56	321.547	1.50	-0.07	1.50
9612.00	91.230	328.370	6844.48	2264.84	1832.18	-1440.89	1629221.88	271436.37	39°14'16.210"N	80°48'32.619"W	2330.89	321.817	0.47	-0.21	-0.42
9701.00	90.920	335.490	6842.80	2353.59	1910.65	-1482.73	1629180.03	271514.84	39°14'16.980"N	80°48'33.165"W	2418.49	322.187	8.01	-0.35	8.00
9791.00	90.680	340.470	6841.55	2443.47	1994.05	-1516.46	1629146.30	271598.23	39°14'17.799"N	80°48'33.609"W	2505.17	322.747	5.54	-0.27	5.53
9881.00	90.650	340.840	6840.51	2533.15	2077.50	-1548.24	1629116.49	271682.00	39°14'18.611"N	80°48'34.044"W	2594.01	323.145	0.11	0.03	0.10
9970.00	90.590	336.700	6839.54	2621.99	2161.64	-1579.20	1629083.57	271765.82	39°14'19.447"N	80°48'34.437"W	2677.04	323.850	4.09	-0.07	-4.09
0059.00	90.650	335.980	6838.58	2710.97	2245.15	-1614.91	1629047.86	271847.33	39°14'20.247"N	80°48'34.906"W	2764.00	324.249	0.81	0.07	-0.81
0149.00	90.620	335.850	6837.58	2800.96	2323.31	-1651.64	1629011.13	271929.49	39°14'21.054"N	80°48'35.388"W	2850.19	324.614	0.15	-0.03	-0.14
0239.00	90.590	334.390	6836.63	2890.95	2406.95	-1689.50	1628973.27	272011.12	39°14'21.855"N	80°48'35.884"W	2942.72	324.934	1.62	-0.03	-1.62
0328.00	90.590	334.840	6835.04	2979.94	2497.16	-1727.30	1628937.14	272094.32	39°14'22.744"N	80°48'36.381"W	3034.40	325.211	0.32	0.03	0.31

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
10418.00	90.650	338.970	6834.60	3069.88	2570.12	-1762.94	1628899.83	272174.28	39°14'23.457"N	80°48'36.848"W	3116.65	325.552	4.59	-0.03	4.59
10507.00	90.590	336.020	6833.63	3158.82	2652.33	-1797.00	1628865.77	272256.49	39°14'24.264"N	80°48'37.296"W	3203.76	325.882	3.32	-0.07	-3.31
10596.00	90.710	336.060	6832.63	3247.81	2733.65	-1833.15	1628829.63	272337.81	39°14'25.063"N	80°48'37.770"W	3291.40	326.155	0.14	0.13	0.04
10686.00	90.620	335.050	6831.58	3337.80	2815.58	-1870.39	1628792.39	272419.73	39°14'25.867"N	80°48'38.259"W	3380.21	326.404	1.13	-0.10	-1.12
10775.00	90.680	332.820	6830.53	3427.75	2895.53	-1909.62	1628753.30	272499.61	39°14'26.632"N	80°48'38.744"W	3468.52	326.597	2.51	0.07	2.51
10865.00	90.650	330.860	6829.53	3516.56	2974.86	-1951.96	1628710.83	272579.00	39°14'27.430"N	80°48'39.325"W	3558.07	326.729	2.18	-0.03	-2.18
10954.00	90.460	330.180	6828.66	3605.22	3052.33	-1995.75	1628667.03	272656.47	39°14'28.189"N	80°48'39.896"W	3646.88	326.821	0.79	-0.21	-0.76
11044.00	90.710	333.010	6827.75	3695.00	3131.48	-2038.56	1628624.23	272735.62	39°14'28.965"N	80°48'40.455"W	3736.56	326.936	3.16	0.28	3.14
11134.00	90.680	336.780	6826.65	3784.97	3212.96	-2076.73	1628586.05	272817.10	39°14'29.765"N	80°48'40.955"W	3825.69	327.123	4.19	-0.03	4.19
11223.00	90.650	332.010	6825.62	3873.92	3294.30	-2117.57	1628543.41	272896.04	39°14'30.563"N	80°48'41.437"W	3915.33	327.330	4.84	0.04	4.84
11313.00	90.710	338.490	6824.55	3963.90	3377.49	-2147.17	1628515.62	272981.62	39°14'31.381"N	80°48'41.881"W	4002.22	327.555	2.76	0.07	2.76
11403.00	90.620	340.370	6823.51	4053.68	3461.74	-2178.79	1628484.01	273065.87	39°14'32.209"N	80°48'42.298"W	4090.33	327.814	2.09	-0.10	2.09
11492.00	90.580	339.690	6822.58	4142.39	3545.39	-2209.18	1628453.61	273149.51	39°14'33.031"N	80°48'42.700"W	4177.55	328.072	0.77	-0.04	-0.76
11582.00	90.580	337.680	6821.66	4232.24	3629.22	-2241.89	1628420.90	273233.34	39°14'33.855"N	80°48'43.131"W	4265.83	328.295	2.23	0.00	-2.23
11671.00	90.180	352.890	6820.74	4321.16	3711.45	-2275.00	1628386.30	273315.08	39°14'34.641"N	80°48'43.547"W	4353.08	328.481	0.72	0.45	0.72
11760.00	89.660	341.040	6821.20	4409.98	3794.69	-2307.39	1628355.41	273398.81	39°14'35.481"N	80°48'43.994"W	4441.14	328.698	4.08	-0.58	4.03
11850.00	89.660	343.430	6821.73	4499.34	3880.39	-2334.85	1628327.95	273484.51	39°14'36.324"N	80°48'44.359"W	4528.68	328.965	2.66	0.00	2.66
11939.00	89.010	338.300	6822.77	4587.92	3964.44	-2364.01	1628298.79	273568.55	39°14'37.150"N	80°48'44.745"W	4615.77	329.192	5.81	-0.73	-5.76
12029.00	89.010	335.430	6824.32	4677.87	4047.18	-2399.36	1628263.44	273651.29	39°14'37.963"N	80°48'45.210"W	4704.96	329.339	3.19	0.00	-3.19
12118.00	89.020	334.000	6825.84	4767.82	4128.57	-2437.57	1628225.47	273732.57	39°14'38.763"N	80°48'45.644"W	4793.51	329.482	2.06	0.00	2.06
12208.00	89.660	337.400	6826.85	4856.83	4210.08	-2473.48	1628189.32	273814.18	39°14'39.562"N	80°48'46.182"W	4882.92	329.565	3.15	0.69	3.08
12298.00	89.600	331.890	6827.43	4946.79	4291.38	-2512.00	1628150.80	273895.48	39°14'40.360"N	80°48'46.687"W	4972.53	329.657	6.12	-0.07	-6.12
12387.00	89.450	331.130	6828.17	5035.57	4369.60	-2554.46	1628108.35	273973.69	39°14'41.127"N	80°48'47.241"W	5061.48	329.690	0.87	-0.17	-0.85
12477.00	89.450	330.670	6829.03	5125.28	4448.23	-2598.22	1628064.59	274052.32	39°14'41.897"N	80°48'47.812"W	5151.46	329.711	0.51	0.00	-0.51
12566.00	89.880	337.210	6830.08	5214.11	4527.53	-2648.70	1628020.11	274131.56	39°14'42.673"N	80°48'48.340"W	5240.30	329.730	1.11	0.29	1.11
12656.00	89.880	337.210	6831.08	5304.15	4609.13	-2675.00	1627987.81	274213.90	39°14'43.483"N	80°48'48.818"W	5329.73	329.874	2.24	0.24	2.22
12745.00	89.820	336.460	6832.00	5393.22	4691.53	-2710.01	1627952.80	274295.72	39°14'44.287"N	80°48'49.278"W	5418.08	329.988	0.85	-0.07	-0.84
12835.00	90.060	337.650	6832.40	5483.09	4774.01	-2745.10	1627917.72	274378.60	39°14'45.101"N	80°48'49.739"W	5507.41	330.103	1.35	0.27	1.32
12924.00	89.880	337.590	6833.40	5572.03	4856.82	-2778.98	1627883.83	274460.89	39°14'45.909"N	80°48'50.185"W	5595.66	330.223	0.21	-0.20	-0.07
13013.00	89.820	339.870	6834.40	5660.92	4939.53	-2813.50	1627847.30	274542.50	39°14'46.711"N	80°48'50.641"W	5683.16	330.317	0.21	0.00	0.00

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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REFERENCE WELLPATH IDENTIFICATION		Slot	Slot D
Operator	NOBLE ENERGY	Well	OXF-97D-HS
Area	Doddridge Co., WV	Wellbore	OXF-97D-HS AWB
Field	Doddridge		
Facility	OXF-97 Pad		

WELLPATH DATA (228 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]
13104.00	89.850	333.710	6830.90	5751.99	5020.26	-2854.30	1627808.52	274624.33	39°14'47.514"N	80°48'51.173"W	5774.95	330.379	1.29	0.00	-1.29
13193.00	89.820	336.930	6831.16	5840.98	5101.12	-2891.46	1627771.36	274705.18	39°14'48.307"N	80°48'51.660"W	5863.61	330.454	3.62	-0.03	3.62
13283.00	90.120	335.190	6831.21	5930.97	5183.37	-2927.98	1627734.85	274787.44	39°14'49.115"N	80°48'52.139"W	5953.18	330.539	1.96	0.33	-1.93
13372.00	90.150	330.410	6831.00	6019.84	5262.51	-2968.65	1627694.18	274866.57	39°14'49.891"N	80°48'52.671"W	6042.09	330.572	5.37	0.03	-5.37
13462.00	90.000	339.270	6830.90	6109.82	5340.40	-3013.72	1627654.46	274946.46	39°14'50.658"N	80°48'53.238"W	6127.98	330.560	1.96	0.17	1.94
13551.00	90.120	330.460	6830.79	6198.01	5417.45	-3058.27	1627604.55	275021.50	39°14'51.409"N	80°48'53.839"W	6221.08	330.554	1.12	0.13	1.11
13641.00	90.060	335.330	6830.65	6287.89	5497.54	-3099.27	1627563.56	275101.59	39°14'52.195"N	80°48'54.375"W	6310.97	330.588	5.41	-0.07	5.41
13731.00	89.540	337.650	6830.96	6377.87	5580.06	-3135.17	1627527.66	275184.11	39°14'53.005"N	80°48'54.846"W	6400.50	330.670	2.64	-0.58	2.58
13820.00	89.170	334.970	6831.96	6466.84	5661.55	-3170.92	1627491.91	275265.60	39°14'53.805"N	80°48'55.316"W	6489.06	330.748	3.04	-0.42	-3.01
13910.00	88.800	335.410	6833.30	6556.85	5745.73	-3207.08	1627454.15	275347.27	39°14'54.607"N	80°48'55.817"W	6577.78	330.826	1.04	0.14	1.00
13999.00	88.830	335.600	6835.40	6645.81	5824.20	-3245.57	1627417.26	275428.24	39°14'55.402"N	80°48'56.295"W	6667.46	330.871	0.22	0.03	0.21
14089.00	88.710	335.720	6837.33	6735.79	5906.18	-3282.66	1627380.18	275510.22	39°14'56.207"N	80°48'56.782"W	6757.13	330.935	0.19	-0.13	0.13
14178.00	88.740	334.520	6839.31	6824.76	5986.90	-3320.09	1627342.75	275590.94	39°14'56.999"N	80°48'57.272"W	6845.87	330.989	1.35	0.03	-1.35
14268.00	88.770	335.610	6841.26	6914.74	6068.49	-3358.02	1627304.81	275672.52	39°14'57.800"N	80°48'57.770"W	6935.63	331.042	1.21	0.03	1.21
14358.00	88.710	336.400	6843.74	7004.71	6150.06	-3394.08	1627268.15	275754.08	39°14'58.617"N	80°48'58.261"W	7025.38	331.100	0.75	-0.17	0.74
14447.00	88.680	334.630	6845.27	7093.69	6231.60	-3431.63	1627231.21	275835.63	39°14'59.401"N	80°48'58.736"W	7114.00	331.159	1.88	-0.03	-1.88
14536.00	88.770	335.070	6847.25	7182.66	6312.15	-3469.45	1627193.40	275916.17	39°15'00.192"N	80°48'59.231"W	7202.79	331.205	0.50	0.10	0.49
14625.00	88.710	337.290	6849.21	7271.62	6393.54	-3505.38	1627157.46	275997.56	39°15'00.991"N	80°48'59.703"W	7291.44	331.265	2.49	-0.07	2.49
14715.00	88.680	332.960	6851.26	7361.58	6475.15	-3543.22	1627119.63	276079.16	39°15'01.792"N	80°49'00.199"W	7381.19	331.312	4.81	-0.03	-4.81
14804.00	88.710	333.400	6853.11	7451.44	6555.07	-3584.55	1627082.78	276160.88	39°15'02.595"N	80°49'00.707"W	7471.14	331.362	1.08	0.04	1.04
14894.00	88.550	335.910	6855.44	7540.38	6635.11	-3623.38	1627045.97	276243.12	39°15'03.361"N	80°49'01.248"W	7560.00	331.361	4.01	-0.18	4.01
14984.00	88.710	336.530	6857.59	7630.34	6717.44	-3659.66	1627008.19	276321.45	39°15'04.170"N	80°49'01.724"W	7649.65	331.418	0.71	0.18	0.69
15073.00	88.400	334.860	6859.83	7719.31	6798.53	-3696.28	1626966.57	276402.53	39°15'04.966"N	80°49'02.205"W	7738.37	331.468	1.91	-0.35	-1.88
15163.00	88.280	336.170	6862.44	7809.27	6880.40	-3733.56	1626929.29	276484.40	39°15'05.770"N	80°49'02.694"W	7828.11	331.514	1.46	-0.13	1.46
15252.00	88.400	336.780	6865.07	7898.27	6961.96	-3770.40	1626892.78	276566.48	39°15'06.588"N	80°49'03.181"W	7917.84	331.570	0.67	0.07	0.67
15342.00	88.830	340.300	6867.29	7988.05	7045.69	-3801.98	1626856.02	276649.68	39°15'07.393"N	80°49'03.595"W	8006.04	331.648	3.95	0.54	3.91
15431.00	89.200	343.200	6868.82	8076.50	7130.19	-3829.83	1626818.37	276734.18	39°15'08.224"N	80°49'03.964"W	8093.65	331.758	3.31	0.42	3.28
15521.00	89.010	343.560	6870.23	8165.63	7216.43	-3855.55	1626807.30	276820.41	39°15'09.073"N	80°49'04.307"W	8181.82	331.886	0.43	-0.21	0.38
15610.00	88.770	338.700	6871.95	8254.16	7300.60	-3884.32	1626778.53	276904.59	39°15'09.900"N	80°49'04.689"W	8269.63	331.985	5.47	-0.27	-5.46
15700.00	88.710	338.200	6873.82	8344.02	7380.77	-3911.48	1626743.41	276989.28	39°15'10.727"N	80°49'05.122"W	8359.80	332.081	0.67	0.07	0.66

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'  
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## REFERENCE WELLPATH IDENTIFICATION

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

## WELLPATH DATA (228 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]
15789.00	88.800	333.770	6875.86	8432.97	7465.50	-3953.69	1626709.17	277069.48	39°15'11.520"N	80°49'05.601"W	8447.80	332.095	4.89	0.10	-4.89
15878.00	88.830	332.750	6877.70	8521.88	7544.96	-3993.73	1626669.13	277148.94	39°15'12.300"N	80°49'06.125"W	8536.76	332.107	1.15	0.03	-1.15
15968.00	88.830	334.850	6879.54	8611.82	7625.70	-4033.45	1626629.41	277229.67	39°15'13.092"N	80°49'06.645"W	8626.70	332.124	2.33	0.00	2.33
16058.00	88.890	340.770	6881.33	8701.69	7708.98	-4067.42	1626595.44	277312.94	39°15'13.910"N	80°49'07.092"W	8716.21	332.183	6.58	0.07	6.58
16148.00	88.920	341.890	6882.96	8794.51	7794.74	-4086.20	1626560.08	277396.91	39°15'14.728"N	80°49'07.617"W	8805.10	332.268	9.25	0.15	9.10
16237.00	89.020	339.320	6884.50	8880.02	7877.48	-4127.71	1626535.16	277481.45	39°15'15.566"N	80°49'07.890"W	8893.41	332.346	1.41	0.00	-1.41
16326.00	89.010	337.860	6886.03	8968.88	7960.33	-4160.19	1626502.68	277564.29	39°15'16.380"N	80°49'08.318"W	8981.87	332.408	1.64	-0.01	-1.64
16416.00	89.110	342.900	6887.50	9058.51	8045.06	-4190.40	1626472.47	277649.02	39°15'17.213"N	80°49'08.718"W	9070.97	332.487	5.60	0.11	5.60
16505.00	89.080	343.670	6888.91	9146.67	8130.29	-4215.99	1626446.88	277734.24	39°15'18.052"N	80°49'09.059"W	9158.40	332.591	0.87	-0.03	0.87
16595.00	89.150	342.490	6890.34	9235.37	8218.35	-4242.14	1626421.60	277820.35	39°15'18.900"N	80°49'09.410"W	9246.81	332.702	1.31	-0.03	-1.31
16685.00	88.650	341.290	6892.19	9325.29	8301.91	-4270.15	1626392.72	277905.85	39°15'19.740"N	80°49'09.780"W	9335.73	332.781	1.41	-0.44	-1.33
16774.00	88.580	341.460	6894.34	9413.80	8386.22	-4298.56	1626364.31	277990.16	39°15'20.569"N	80°49'10.157"W	9423.71	332.861	0.21	-0.08	0.19
16864.00	88.670	339.450	6896.50	9503.43	8471.01	-4328.66	1626334.21	278074.94	39°15'21.403"N	80°49'10.555"W	9512.90	332.933	2.23	0.10	-2.23
16953.00	88.550	338.280	6898.66	9592.25	8553.99	-4360.74	1626302.13	278157.93	39°15'22.218"N	80°49'10.978"W	9601.40	332.988	1.32	-0.13	-1.31
17042.00	88.630	339.440	6900.84	9681.03	8637.00	-4392.48	1626270.11	278240.98	39°15'23.050"N	80°49'11.411"W	9690.31	333.068	1.52	0.11	1.51
17132.00	88.550	337.280	6903.03	9770.90	8720.71	-4425.73	1626237.15	278324.64	39°15'23.856"N	80°49'11.836"W	9779.46	333.092	2.61	-0.11	-2.61
17200.00	88.710	336.250	6904.66	9838.86	8783.18	-4452.55	1626210.33	278387.10	39°15'24.470"N	80°49'12.188"W	9847.30	333.118	1.53	0.24	-1.51
17225.00	88.710	336.250	6905.22	9863.86	8806.05	-4462.62	1626200.26	278409.98	39°15'24.695"N	80°49'12.320"W	9872.26	333.126	0.00	0.00	0.00

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'

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## REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot D
Area	Doddridge Co., WV	Well	OXF-97D-HS
Field	Doddridge	Wellbore	OXF-97D-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-97D-HS LP Rev-2		6870.00	-154.72	-525.061	1630137.67	269449.55	39°13'56.706"N	80°48'20.613"W	point
OXF-97D-HS BHL Rev-2		6902.00	8762.20	-4590.60	1626072.28	278366.13	39°15'24.243"N	80°49'13.939"W	point
OXF-97D-HS BHL Rev-3		6902.13	8808.74	-4488.50	1626174.38	278412.67	39°15'24.717"N	80°49'12.650"W	point
OXF-97 LL		7198.45	60.02	0.06	1630662.77	269664.28	39°13'58.904"N	80°48'13.980"W	polygon

## WELLPATH COMPOSITION - Ref Wellbore: OXF-97D-HS AWB Ref Wellpath: OXF-97D-HS AWP Proj: 17225'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	2987.00	Generic gyro - northseeking (Standard)	01_MS Gyro <12-1/4"> (100'-2979')	OXF-97D-HS AWB
2987.00	5952.00	ISWASA MWD, Rev. 2 (Standard)	02_Scientific EM <8-3/4"> (2979')(3031'-5944')	OXF-97D-HS AWB
5952.00	17200.00	NaviTrak (AT Curve Short Spaced)	03_BHI AT Curve <8-1/2"> (5952')(6031'-17200')	OXF-97D-HS AWB
17200.00	17225.00	Blind Drilling (sid)	Projection to bit	OXF-97D-HS AWB

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# Actual Wellpath Report

OXF-97D-HS AWP Proj: 17225'

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## REFERENCE WELLPATH IDENTIFICATION

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

## COMMENTS

Wellpath general comments  
 API: 47-017-06484-0000  
 BHI Job #: 7224486  
 Rig: Precision 543  
 Duration: 5/1/2015-5/6/2015  
 MS Gyro <12-1/4"> (100'-2979')  
 Scientific EM <8-3/4"> (2979')(3031'-5944')  
 BHI AT Curve <8-1/2"> (5952')(6031'-17200')  
 Projected MD at TD: 17225'

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# NOBLE ENERGY

Location: Doddridge Co., WV  
 Field: Doddridge  
 Facility: OXF-97 Pad

Slot: Slot D  
 Well: OXF-97D-HS  
 Wellbore: OXF-97D-HS PWB



True vertical depths are referenced to Precision 643 (RKB)  
 Measured depths are referenced to Precision 643 (RKB)  
 Precision 643 (RKB) to Mean Sea Level: 1351.65 feet  
 Mean Sea Level to Mud Line (At Slot): 0.00 feet  
 Coordinates are as listed, referenced to Slot D

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
OXF-97 Pad	1630862.770	269864.280	38°15'58.904"N	80°46'13.960"W
Slot D	-01.02	-0.06	38°15'58.311"N	80°46'13.970"W
Precision 643 (RKB) to Mud Line (At Slot)	-18ft			
Mean Sea Level to Mud Line (At Slot)	-1333.45ft			
Precision 643 (RKB) to Mean Sea Level	1351.65ft			

MS Gyro <12-1/4"> (100°-2979') : 0.16° Inc, 108.00ft MD, 108.00ft TVD, -0.01ft VS

Scientific EM <8-3/4"> (2979)(3031-5944) : 0.50° Inc, 3038.89ft MD, 3038.89ft TVD, -5.48ft VS

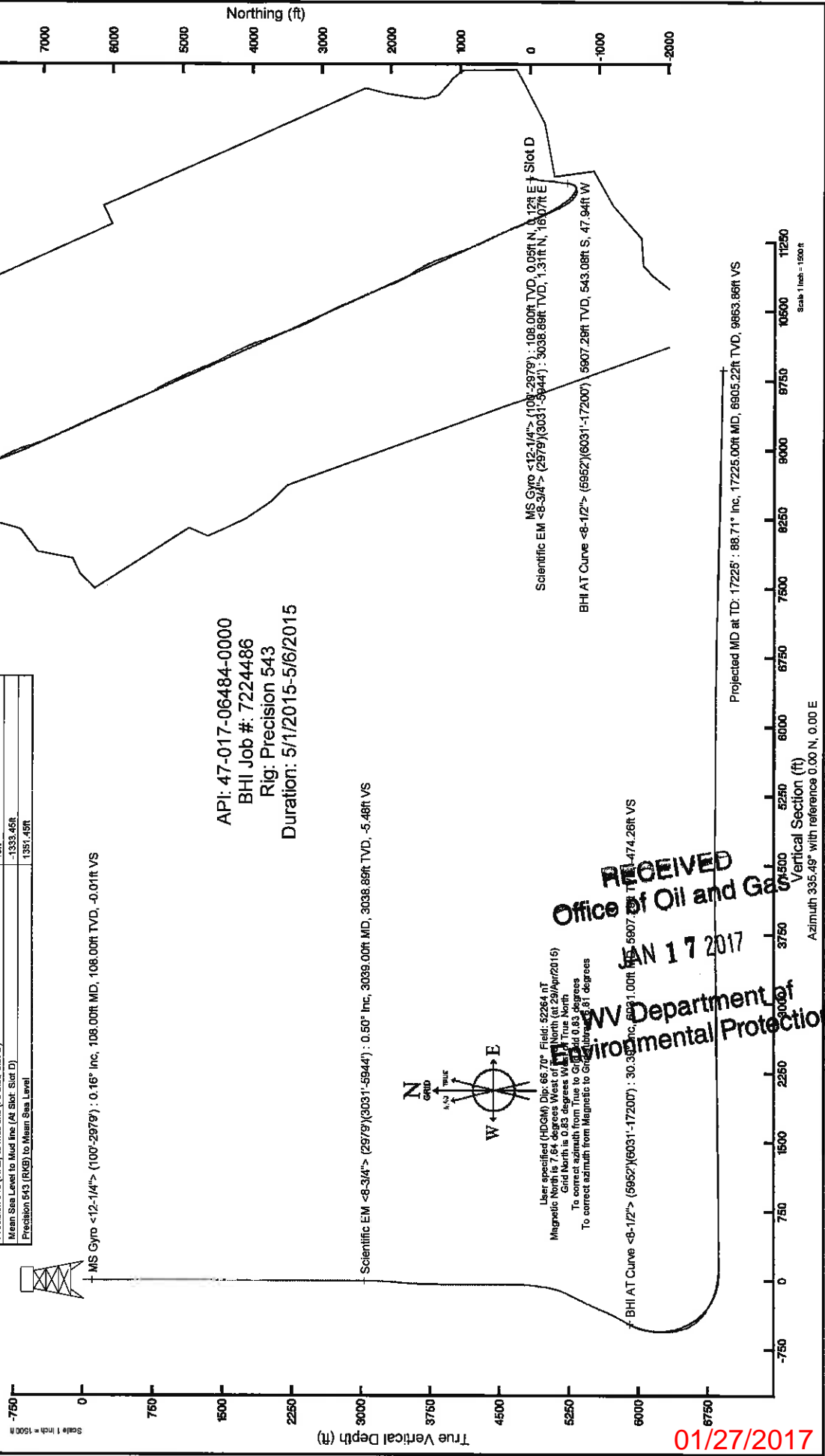
BHI AT Curve <8-1/2"> (5952)(6031-17200) : 30.33° Inc, 5907.29ft MD, 5907.29ft TVD, -474.26ft VS

MS Gyro <12-1/4"> (108°-2979') : 108.00ft TVD, 0.05ft N, 0.12ft E, Slot D

Scientific EM <8-3/4"> (2979)(3031-5944) : 3038.89ft TVD, 1.31ft N, 16.07ft E

BHI AT Curve <8-1/2"> (5952)(6031-17200) : 5907.29ft TVD, 543.08ft S, 47.94ft W

Projected MD at TD: 17225' : 88.71° Inc, 17225.00ft MD, 6805.22ft TVD, 9863.66ft VS



API: 47-017-06484-0000  
 BHI Job #: 7224486  
 Rig: Precision 543  
 Duration: 5/1/2015-5/6/2015

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