

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

IPK reference wellbore is OXF-97D-HS PWB Rev. 8.0
 True vertical depths are referenced to Precision 543 (RKB)
 Measured depths are referenced to Precision 543 (RKB)
 Precision 543 (RKB) to Mean Sea Level: 1351.45ft
 Mean Sea Level to Mud line (At Slot D): -1351.45ft
 Coordinates are in feet referenced to Slot

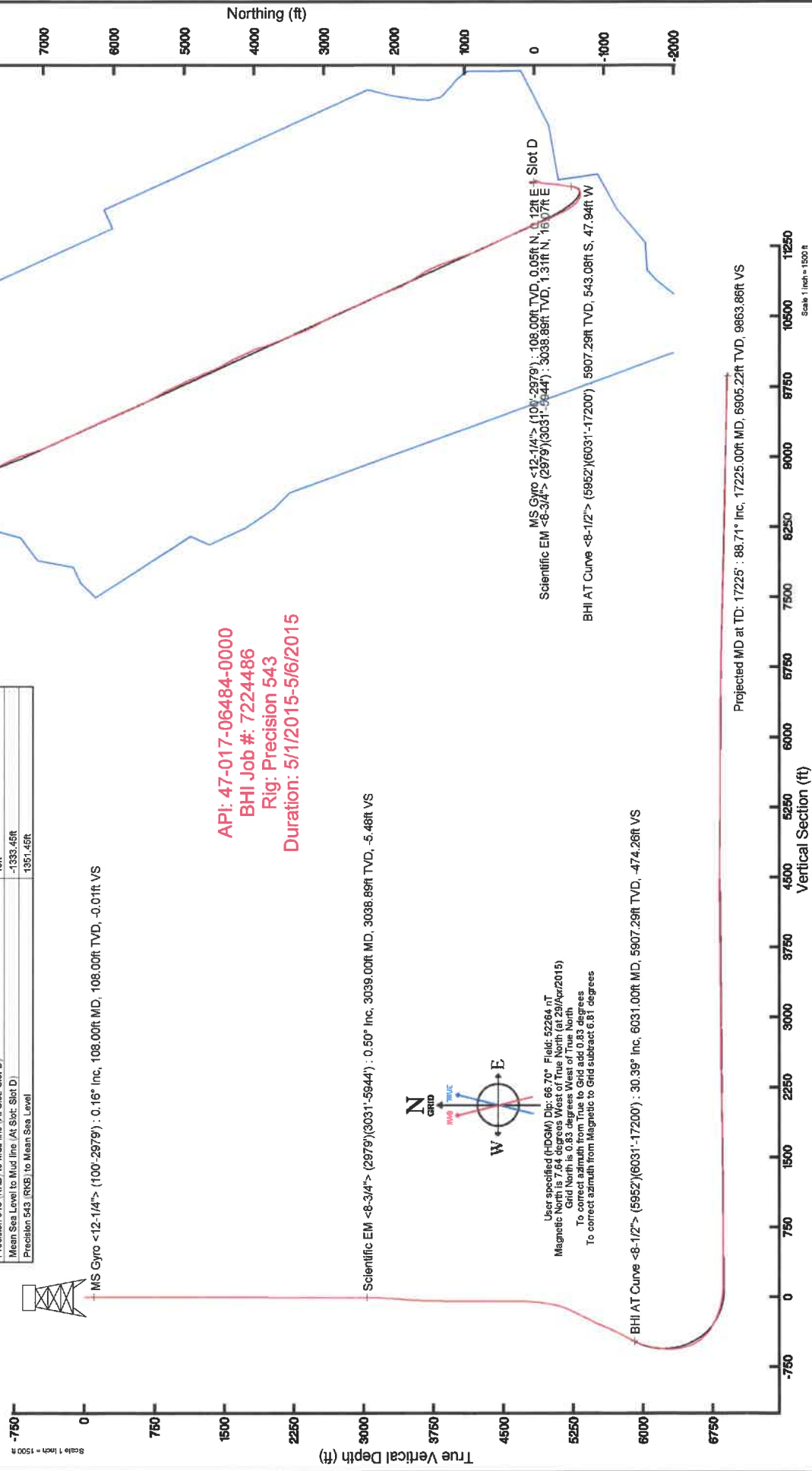
Grid System: NAD27 / Lambert West Virginia 57° Northern Zone (470), US feet
 North Reference: Grid North
 Scale: True distance
 Depths are in feet
 Created by: adair on 12/May/2015

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
OXF-97 Pad	1630962.770	269864.280	80°48'13.980"W
Slot	Local E (ft)	Grid East (US ft)	Longitude
Slot D	-80.02	1630962.710	80°48'13.970"W
Precision 543 (RKB) to Mud line (At Slot: Slot D)			18ft
Mean Sea Level to Mud line (At Slot: Slot D)			-1351.45ft
Precision 543 (RKB) to Mean Sea Level			1351.45ft

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°-5844°) : 0.50° Inc, 3039.00ft MD, 3038.86ft TVD, -5.48ft VS

BHI AT Curve <8-1/2"> (5952°)(6031°-17200°) : 30.39° Inc, 6031.00ft MD, 5907.29ft TVD, -474.26ft VS



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



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		

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	12/May/2015 at 16:51
Convergence at slot	0.83° West	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°13'58.31"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	Precision 543 (RKB) to Facility Vertical Datum	1351.45ft
Horizontal Reference Pt	Slot	Precision 543 (RKB) to Mean Sea Level	1351.45ft
Vertical Reference Pt	Precision 543 (RKB)	Precision 543 (RKB) to Mud Line at Slot (Slot D)	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°



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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]
0.00†	0.000	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
308.00	0.130	226.340	308.00	0.10	0.17	0.13	1630662.84	269604.43	39°13'58.312"N	80°48'13.968"W	0.21	36.930	0.19	0.04	-119.43
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	0.290	6.290	807.99	0.21	1.10	1.90	1630664.61	269605.36	39°13'58.322"N	80°48'13.946"W	2.19	59.957	0.26	-0.26	-5.92
908.00	0.230	32.610	907.99	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	0.780	55.420	1307.96	0.47	3.27	6.03	1630668.74	269607.53	39°13'58.344"N	80°48'13.894"W	6.86	61.529	0.03	-0.01	-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	0.430	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	0.370	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	0.730	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	0.870	111.540	1807.93	-0.41	4.41	10.67	1630673.38	269608.67	39°13'58.356"N	80°48'13.835"W	11.54	67.548	0.16	0.14	6.02
1908.00	0.820	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	0.260	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	0.210	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	0.120	146.970	2307.91	-2.61	3.77	14.55	1630677.26	269608.03	39°13'58.350"N	80°48'13.786"W	15.03	75.482	0.20	-0.09	66.51
2408.00	0.430	143.250	2407.91	-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
2508.00	0.400	158.880	2507.90	-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
2608.00	0.370	140.330	2607.90	-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	0.130	74.690	2807.90	-5.24	1.75	16.46	1630679.17	269606.01	39°13'58.330"N	80°48'13.761"W	16.55	83.933	0.28	-0.25	-33.87



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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)
2908.00	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
3100.00	0.300	114.430	3099.89	-5.41	1.44	16.20	1630678.91	269605.70	39°13'58.327"N	80°48'13.764"W	16.27	84.923	0.74	0.10	150.97
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
3251.00	3.910	152.880	3250.72	-12.07	-4.54	19.13	1630681.84	269599.72	39°13'58.268"N	80°48'13.726"W	19.66	103.362	0.92	0.90	-2.83
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
3402.00	4.630	153.160	3401.31	-23.12	-14.34	24.29	1630687.00	269589.92	39°13'58.172"N	80°48'13.659"W	28.20	120.552	0.42	0.30	3.60
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
3523.00	3.690	147.660	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
3553.00	2.880	148.130	3551.89	-34.15	-23.84	30.02	1630692.73	269580.42	39°13'58.079"N	80°48'13.584"W	38.34	128.452	2.70	-2.70	1.57
3583.00	2.640	157.030	3581.86	-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
3613.00	2.570	152.780	3611.83	-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
3643.00	2.250	149.220	3641.80	-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
3677.00	1.350	150.170	3675.78	-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
3768.00	0.910	124.630	3766.77	-40.95	-29.72	33.54	1630696.25	269574.55	39°13'58.022"N	80°48'13.538"W	44.81	131.536	0.72	-0.48	-28.07
3859.00	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
3949.00	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
4040.00	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
4222.00	1.160	260.300	4220.74	-43.28	-32.27	33.57	1630696.28	269571.99	39°13'57.996"N	80°48'13.538"W	46.56	133.869	0.77	0.75	14.97



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Field	Doddridge	Wellbore	OXF-97D-HS AWB
Facility	OXF-97 Pad		

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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	1.340	199.000	4675.69	-43.19	-33.65	30.30	1630693.01	269570.61	39°13'57.982"N	80°48'13.579"W	45.28	137.993	2.30	0.52	156.42
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
4863.00	9.210	200.550	4860.80	-55.19	-49.40	24.69	1630687.39	269554.86	39°13'57.826"N	80°48'13.647"W	55.23	153.449	5.20	5.19	2.61
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	197.670	5066.26	-88.28	-93.49	7.74	1630670.45	269510.77	39°13'57.388"N	80°48'13.854"W	93.81	175.267	7.25	6.77	-8.97
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
5135.00	21.720	191.650	5123.62	-104.45	-113.57	2.69	1630665.40	269490.70	39°13'57.189"N	80°48'13.915"W	113.60	178.641	6.49	5.97	-7.17
5165.00	23.600	188.840	5151.30	-113.95	-124.94	0.65	1630663.36	269479.33	39°13'57.076"N	80°48'13.939"W	124.94	179.702	7.23	6.27	-9.37
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	137.87	180.455	8.88	8.35	-7.13
5226.00	27.870	186.930	5206.14	-136.64	-151.41	-2.71	1630660.01	269452.86	39°13'56.814"N	80°48'13.977"W	151.43	181.024	5.62	5.60	1.00
5256.00	29.000	187.760	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	29.220	187.780	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	186.070	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	184.690	5337.73	-200.06	-224.96	-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	28.930	182.480	5390.94	-226.38	-254.74	-13.03	1630649.68	269349.53	39°13'55.791"N	80°48'14.089"W	255.07	182.928	2.13	-1.18	-3.62
5498.00	28.120	182.570	5443.65	-251.90	-283.36	-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	183.300	5470.99	-264.88	-297.97	-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	183.400	5497.50	-277.29	-311.98	-15.86	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	184.260	5524.12	-289.46	-325.78	-16.78	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	26.660	186.300	5550.86	-301.26	-339.32	-18.03	1630644.68	269264.95	39°13'54.955"N	80°48'14.137"W	339.80	183.042	3.69	-2.03	6.80



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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]
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	29.640	191.170	5684.56	-358.61	-408.22	-30.93	1630631.78	269196.05	39°13'54.272"N	80°48'14.288"W	409.39	184.333	3.40	3.37	-0.93
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	32.540	186.470	5813.35	-424.66	-486.13	-42.58	1630620.13	269118.15	39°13'53.500"N	80°48'14.421"W	487.99	185.006	1.09	-0.53	-1.77
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	220.240	6153.52	-548.09	-641.16	-85.08	1630577.63	268963.12	39°13'51.962"N	80°48'14.933"W	646.78	187.559	5.40	-3.99	11.22
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	34.630	303.150	6565.82	-490.70	-648.04	-238.49	1630424.23	268956.25	39°13'51.872"N	80°48'16.881"W	690.53	200.205	13.57	11.37	15.24
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
7195.00	72.060	332.890	6820.86	-142.01	-356.91	-440.49	1630222.23	269247.36	39°13'54.720"N	80°48'19.501"W	566.94	230.984	5.70	5.69	0.43
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	89.750	337.460	6862.98	300.79	50.89	-613.45	1630049.29	269655.14	39°13'58.725"N	80°48'21.774"W	615.55	274.742	2.80	-0.41	-2.77



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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	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)
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	2.08	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	336.880	6864.47	748.66	456.22	-804.04	1629858.70	270060.46	39°14'02.704"N	80°48'24.271"W	924.45	299.571	3.62	-0.03	3.62
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	338.930	6863.37	1195.52	862.49	-990.10	1629672.65	270466.72	39°14'06.692"N	80°48'26.711"W	1313.08	311.060	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	91.050	340.380	6857.96	1641.18	1282.09	-1144.08	1629518.67	270886.30	39°14'10.817"N	80°48'28.745"W	1718.33	318.256	0.58	0.31	0.48
9075.00	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	91.480	327.400	6848.84	2086.30	1679.06	-1346.38	1629316.38	271283.25	39°14'14.711"N	80°48'31.389"W	2152.20	321.275	0.16	0.08	0.13
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
9880.00	90.650	340.380	6840.51	2532.13	2077.90	-1546.28	1629116.49	271682.08	39°14'18.624"N	80°48'34.003"W	2590.11	323.345	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
10059.00	90.650	335.980	6838.58	2710.97	2243.15	-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
10149.00	90.620	335.850	6837.58	2800.96	2325.31	-1651.64	1629011.13	271929.49	39°14'21.054"N	80°48'35.388"W	2852.19	324.614	0.15	-0.03	-0.14
10239.00	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	2940.72	324.934	1.62	-0.03	-1.62
10328.00	90.680	334.840	6835.64	2979.94	2487.36	-1727.65	1628935.12	272091.52	39°14'22.644"N	80°48'36.384"W	3028.49	325.217	0.52	0.10	0.51



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REFERENCE WELLPATH IDENTIFICATION

	Slot	Slot D
Operator	NOBLE ENERGY	
Area	Doddridge Co., WV	OXF-97D-HS
Field	Doddridge	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	6830.57	3426.75	2895.52	-1909.49	1628753.30	272499.67	39°14'26.652"N	80°48'38.771"W	3468.45	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	336.010	6825.62	3873.95	3294.50	-2112.37	1628550.42	272898.64	39°14'30.565"N	80°48'41.423"W	3913.55	327.333	0.87	-0.03	-0.87
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	4177.35	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	337.450	6821.07	4321.18	3711.48	-2275.86	1628386.94	273315.60	39°14'34.663"N	80°48'43.578"W	4353.69	328.484	0.52	-0.45	-0.26
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
12119.00	89.050	334.660	6825.84	4767.85	4128.77	-2437.33	1628225.47	273732.87	39°14'38.763"N	80°48'45.708"W	4794.51	329.445	0.86	0.04	-0.86
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	89.660	335.210	6829.72	5214.16	4527.47	-2638.70	1628024.11	274131.56	39°14'42.675"N	80°48'48.341"W	5240.29	329.766	5.11	0.24	5.10
12656.00	89.880	337.210	6830.08	5304.15	4609.81	-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	6830.32	5393.12	4691.64	-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	6830.41	5483.09	4774.52	-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	6830.46	5572.03	4856.81	-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
13014.00	89.850	334.870	6830.67	5662.01	4939.17	-2815.26	1627847.56	274543.24	39°14'46.718"N	80°48'50.661"W	5685.16	330.317	3.02	-0.03	-3.02



Actual Wellpath Report

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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]
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	329.470	6830.88	6109.42	5340.40	-3013.73	1627649.10	274944.46	39°14'50.654"N	80°48'53.258"W	6132.08	330.563	1.06	-0.17	-1.04
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	6833.56	6556.83	5743.23	-3208.68	1627454.15	275347.27	39°14'54.607"N	80°48'55.811"W	6578.78	330.808	0.64	-0.41	0.49
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	336.300	6843.24	7004.71	6150.66	-3394.68	1627268.15	275754.69	39°14'58.607"N	80°48'58.251"W	7025.28	331.105	0.77	-0.07	0.77
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
14805.00	88.710	332.340	6853.31	7451.44	6555.07	-3584.55	1627078.29	276159.08	39°15'02.576"N	80°49'00.740"W	7471.14	331.329	0.69	0.03	-0.69
14894.00	88.550	335.910	6855.44	7540.38	6635.11	-3623.38	1627039.47	276239.12	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	1627003.19	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	88.340	336.780	6865.07	7898.22	6961.96	-3769.07	1626893.78	276565.96	39°15'06.570"N	80°49'03.161"W	7916.74	331.570	0.69	0.07	0.69
15342.00	88.830	340.300	6867.29	7988.05	7045.69	-3801.98	1626860.87	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	343.220	6868.82	8076.50	7130.19	-3829.83	1626833.02	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	338.120	6873.93	8344.02	7384.27	-3917.43	1626745.43	276988.25	39°15'10.722"N	80°49'05.125"W	8359.05	332.054	0.65	-0.07	-0.64



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
16147.00	89.020	340.590	6882.96	8790.31	7792.95	-4096.86	1626566.00	277396.91	39°15'14.735"N	80°49'07.482"W	8804.22	332.268	0.25	0.15	-0.20
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	89.050	342.490	6890.38	9235.87	8216.38	-4242.18	1626420.69	277820.33	39°15'18.899"N	80°49'09.408"W	9246.89	332.692	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	88.650	339.630	6900.83	9681.05	8637.03	-4392.69	1626270.18	278240.96	39°15'23.034"N	80°49'11.400"W	9689.89	333.043	1.52	0.11	1.52
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



Actual Wellpath Report

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

Operator	Slot	Slot D
NOBLE ENERGY	Well	OXF-97D-HS
Area	Wellbore	OXF-97D-HS AWB
Field		
Facility		

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	-525.06	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	ISCVSA 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 (std)	Projection to bit	OXF-97D-HS AWB



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'