



Actual Wellpath Report

OXF-97A-HS AWP Proj: 16766'
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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot A
Area	Doddridge Co., WV	Well	OXF-97A-HS
Field	Doddridge	Wellbore	OXF-97A-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 11:54
Convergence at slot	0.83° West	Database/Source file	WellArchitectEasternDB\OXF-97A-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	-0.03	0.03	1630662.80	269664.25	39°13'58.903"N	80°48'13.980"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 A)	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°

Office of Oil and Gas
JAN 17 2017
Department of Environmental Protection

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WELLPATH DATA (208 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [ft]	Grid North [ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	150.880	0.00	0.00	0.00	0.00	1630662.80	269664.25	39°13'58.903"N	80°48'13.980"W	0.00	0.000	0.00	0.00	0.00
18.00	0.000	150.880	18.00	0.00	0.00	0.00	1630662.80	269664.25	39°13'58.903"N	80°48'13.980"W	0.00	0.000	0.00	0.00	0.00
118.00	0.400	150.880	118.00	-0.35	-0.30	0.17	1630662.97	269663.95	39°13'58.900"N	80°48'13.978"W	0.35	150.880	0.40	0.40	0.00
218.00	0.200	173.230	218.00	-0.86	-0.78	0.36	1630663.16	269663.47	39°13'58.896"N	80°48'13.975"W	0.86	155.295	0.23	-0.20	22.35
318.00	0.280	153.740	318.00	-1.27	-1.18	0.49	1630663.29	269663.07	39°13'58.892"N	80°48'13.974"W	1.27	157.416	0.11	0.08	-19.49
418.00	0.380	105.680	418.00	-1.73	-1.48	0.92	1630663.72	269662.77	39°13'58.889"N	80°48'13.968"W	1.74	148.311	0.28	0.10	-48.06
518.00	0.350	95.200	517.99	-2.10	-1.60	1.54	1630664.34	269662.65	39°13'58.888"N	80°48'13.960"W	2.22	136.128	0.07	-0.03	-10.48
618.00	0.380	106.930	617.99	-2.47	-1.73	2.16	1630664.96	269662.52	39°13'58.887"N	80°48'13.952"W	2.77	128.611	0.08	0.03	11.73
718.00	0.270	117.700	717.99	-2.87	-1.93	2.69	1630665.49	269662.32	39°13'58.885"N	80°48'13.945"W	3.31	125.716	0.13	-0.11	10.77
818.00	0.370	130.520	817.99	-3.35	-2.25	3.14	1630665.94	269662.00	39°13'58.882"N	80°48'13.940"W	3.96	125.639	0.12	0.10	12.82
918.00	0.180	106.360	917.99	-3.75	-2.51	3.54	1630666.34	269661.74	39°13'58.879"N	80°48'13.935"W	4.33	125.309	0.22	-0.19	-24.16
1018.00	0.090	144.140	1017.99	-3.93	-2.61	3.73	1630666.53	269661.64	39°13'58.878"N	80°48'13.932"W	4.56	124.986	0.12	-0.09	37.78
1118.00	0.090	129.860	1117.99	-4.07	-2.73	3.84	1630666.64	269661.52	39°13'58.877"N	80°48'13.931"W	4.71	125.381	0.02	0.00	-14.28
1218.00	0.330	95.260	1217.99	-4.29	-2.80	4.19	1630666.99	269661.45	39°13'58.876"N	80°48'13.926"W	5.04	123.807	0.26	0.24	-34.60
1318.00	0.320	-2.250	1317.98	-4.37	-2.62	4.66	1630667.46	269661.53	39°13'58.876"N	80°48'13.920"W	5.35	119.374	0.20	0.01	-1.01
1418.00	0.660	25.890	1417.98	-3.84	-1.90	5.10	1630667.90	269662.35	39°13'58.885"N	80°48'13.915"W	5.44	110.417	0.36	0.34	-16.36
1518.00	0.810	5.520	1517.97	-2.86	-0.68	5.42	1630668.22	269663.57	39°13'58.908"N	80°48'13.911"W	5.46	97.120	0.30	0.15	-20.37
1618.00	0.440	36.330	1617.97	-2.07	0.34	5.72	1630668.52	269664.59	39°13'58.908"N	80°48'13.907"W	5.73	86.638	0.49	-0.37	30.81
1718.00	0.400	78.020	1717.96	-1.96	0.73	6.33	1630669.13	269664.98	39°13'58.912"N	80°48'13.900"W	6.37	83.450	0.32	0.01	41.69
1818.00	0.500	101.940	1817.96	-2.34	0.71	7.19	1630669.99	269664.96	39°13'58.911"N	80°48'13.899"W	7.22	84.344	0.24	0.11	23.92
1918.00	0.600	124.430	1917.96	-2.66	0.71	7.98	1630670.78	269664.96	39°13'58.912"N	80°48'13.879"W	8.01	84.906	0.30	-0.18	-30.51
2018.00	0.600	146.870	2017.96	-2.70	0.91	8.51	1630671.31	269665.16	39°13'58.914"N	80°48'13.872"W	8.56	83.875	0.11	-0.11	-5.56
2118.00	0.600	168.140	2117.95	-2.77	1.04	8.95	1630671.75	269665.29	39°13'58.915"N	80°48'13.866"W	9.01	83.393	0.08	-0.01	17.27
2218.00	0.600	188.800	2217.95	-2.91	1.03	9.28	1630672.08	269665.28	39°13'58.915"N	80°48'13.862"W	9.33	83.663	0.16	-0.14	25.66
2318.00	0.600	208.430	2317.95	-3.27	0.79	9.60	1630672.40	269665.04	39°13'58.913"N	80°48'13.858"W	9.47	83.315	0.25	0.23	34.63
2418.00	0.600	228.590	2417.95	-3.74	0.41	9.91	1630672.71	269664.66	39°13'58.909"N	80°48'13.854"W	9.92	87.636	0.15	-0.13	17.16
2518.00	0.600	120.940	2517.95	-4.03	0.18	10.11	1630672.91	269664.43	39°13'58.907"N	80°48'13.852"W	10.11	88.985	0.12	-0.08	-29.65
2618.00	0.600	114.240	2617.95	-4.27	0.04	10.38	1630673.18	269664.29	39°13'58.905"N	80°48'13.848"W	10.38	89.773	0.07	0.07	-6.70
2718.00	0.230	154.520	2717.95	-4.61	-0.22	10.64	1630673.44	269664.03	39°13'58.903"N	80°48'13.845"W	10.64	91.159	0.15	0.02	40.28
2818.00	0.140	153.090	2817.95	-4.93	-0.51	10.78	1630673.76	269663.74	39°13'58.900"N	80°48'13.843"W	10.78	92.084	0.09	0.09	-1.43

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Area	Doddridge Co., WV	Wellbore	OXF-97A-HS AWB
Field	Doddridge		
Facility	OXF-97 Pad		

WELLPATH DATA (208 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]
2918.00	0.210	147.300	2917.95	-5.24	-0.77	10.93	1630673.73	269663.48	39°13'58.897"N	80°48'13.841"W	10.96	94.021	0.07	0.07	-5.79
2975.00	0.200	147.570	2974.95	-5.44	-0.94	11.04	1630673.84	269663.31	39°13'58.896"N	80°48'13.839"W	11.08	94.867	0.02	-0.22	0.47
3102.00	0.480	229.310	3101.95	-5.80	-1.47	10.76	1630673.56	269662.78	39°13'58.890"N	80°48'13.843"W	10.86	97.803	0.39	0.02	64.36
3132.00	2.530	210.400	3131.93	-6.22	-2.13	10.33	1630673.13	269662.12	39°13'58.884"N	80°48'13.848"W	10.55	101.639	6.94	6.83	-63.03
3162.00	4.110	204.770	3161.88	-7.39	3.67	9.54	1630672.34	269660.58	39°13'58.868"N	80°48'13.838"W	10.23	111.060	5.37	5.27	-18.71
3192.00	5.360	206.130	3191.78	-8.89	-5.91	8.48	1630671.28	269658.34	39°13'58.846"N	80°48'13.871"W	10.33	124.883	4.18	4.17	4.53
3222.00	7.060	207.330	3221.60	-10.92	-8.81	7.01	1630669.81	269655.45	39°13'58.817"N	80°48'13.889"W	11.26	141.468	5.68	5.67	4.00
3253.00	8.480	208.410	3252.32	-13.48	-12.51	5.05	1630667.85	269651.74	39°13'58.781"N	80°48'13.914"W	13.49	158.015	4.60	4.58	3.48
3283.00	9.270	209.810	3281.96	-16.22	-16.55	2.80	1630665.60	269647.70	39°13'58.740"N	80°48'13.941"W	16.78	170.411	2.73	2.63	4.67
3313.00	11.030	212.520	3311.49	-19.19	-21.07	0.05	1630663.85	269643.18	39°13'58.697"N	80°48'13.975"W	21.07	179.859	1.94	1.87	5.83
3343.00	11.960	211.240	3340.89	-22.50	-26.14	-3.10	1630659.70	269638.11	39°13'58.645"N	80°48'14.015"W	26.33	186.769	3.21	3.10	-4.27
3374.00	12.540	210.330	3371.18	-26.25	-31.80	-6.47	1630656.33	269632.46	39°13'58.588"N	80°48'14.056"W	32.45	191.499	1.97	1.87	-2.94
3404.00	13.780	209.350	3400.39	-30.23	-37.72	-9.86	1630652.94	269626.53	39°13'58.529"N	80°48'14.098"W	38.99	194.655	4.20	4.13	-3.27
3434.00	14.350	208.720	3429.49	-34.56	-44.10	-13.40	1630649.40	269620.16	39°13'58.466"N	80°48'14.142"W	46.09	196.906	1.97	1.90	-2.10
3464.00	14.640	207.830	3458.54	-39.10	-50.71	-16.96	1630645.94	269613.54	39°13'58.400"N	80°48'14.186"W	53.47	198.491	1.22	1.17	-2.97
3494.00	16.210	207.940	3487.46	-43.97	-57.76	-20.69	1630642.11	269606.49	39°13'58.330"N	80°48'14.232"W	61.36	199.708	5.23	5.23	0.37
3524.00	17.860	205.760	3516.22	-49.31	-65.38	-24.54	1630638.26	269598.87	39°13'58.254"N	80°48'14.280"W	69.83	200.576	2.99	2.17	-7.27
3555.00	27.390	206.050	3545.84	-55.12	-73.59	-28.53	1630634.27	269590.66	39°13'58.172"N	80°48'14.329"W	78.93	201.192	1.73	1.71	0.94
3585.00	38.720	205.300	3574.36	-61.08	-81.97	-32.56	1630630.24	269582.28	39°13'58.089"N	80°48'14.379"W	88.20	201.663	4.50	4.43	-2.50
3615.00	51.260	205.640	3602.73	-67.35	-90.78	-36.76	1630626.04	269573.47	39°13'58.007"N	80°48'14.430"W	97.94	202.042	1.84	1.80	1.13
3645.00	59.020	205.070	3631.47	-73.77	-99.72	-40.90	1630621.90	269564.53	39°13'57.912"N	80°48'14.481"W	107.78	202.299	1.82	-0.60	-5.23
3675.00	69.800	204.890	3659.40	-80.31	-108.74	-44.91	1630617.89	269555.52	39°13'57.822"N	80°48'14.531"W	117.65	202.440	0.86	0.83	-0.60
3706.00	81.090	204.590	3687.40	-87.35	-118.48	-49.30	1630613.50	269545.77	39°13'57.725"N	80°48'14.585"W	128.33	202.591	5.44	5.39	2.26
3736.00	91.450	205.330	3715.44	-94.44	-128.38	-53.93	1630608.88	269535.88	39°13'57.627"N	80°48'14.642"W	139.24	202.785	2.66	2.40	3.13
3766.00	101.800	206.030	3743.48	-101.53	-138.41	-58.82	1630603.98	269525.85	39°13'57.527"N	80°48'14.706"W	150.39	203.026	1.48	1.80	3.53
3796.00	112.100	206.820	3771.52	-108.84	-148.79	-63.99	1630598.82	269515.46	39°13'57.424"N	80°48'14.766"W	161.97	203.269	5.27	5.21	-0.70
3827.00	122.400	207.490	3800.17	-116.83	-160.22	-69.79	1630593.01	269504.03	39°13'57.310"N	80°48'14.837"W	174.76	203.537	5.92	5.71	3.77
3857.00	132.700	207.860	3828.24	-124.76	-171.68	-75.80	1630587.00	269492.58	39°13'57.196"N	80°48'14.911"W	187.67	203.822	1.62	1.53	1.23
3887.00	143.000	209.840	3856.46	-132.78	-183.44	-82.29	1630580.51	269480.81	39°13'57.079"N	80°48'14.992"W	201.05	204.160	6.36	5.63	6.60
3917.00	153.300	211.660	3884.51	-140.84	-195.61	-89.53	1630572.27	269468.65	39°13'56.957"N	80°48'15.082"W	215.12	204.594	5.47	4.47	6.07

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

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[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]	[°]	[°]	[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
3947.00	29.290	211.790	3906.73	-148.94	-208.01	-97.20	1630565.61	2694566.25	39°13'56.834"N	80°48'15.177"W	229.60	205.046	1.45	1.43	0.43
3978.00	30.100	211.280	3933.66	-157.52	-221.10	-105.23	1630557.58	2694443.16	39°13'56.703"N	80°48'15.276"W	244.86	205.452	2.74	2.61	-1.65
4008.00	30.110	212.060	3959.61	-165.89	-233.90	-113.13	1630549.68	2694303.36	39°13'56.576"N	80°48'15.374"W	259.82	205.811	1.30	0.03	2.60
4038.00	29.900	211.350	3985.59	-174.24	-246.67	-121.01	1630541.79	2694175.59	39°13'56.448"N	80°48'15.472"W	274.75	206.132	1.38	-0.70	-2.37
4129.00	30.450	208.910	4064.27	-200.78	-286.21	-143.95	1630518.85	2693780.85	39°13'56.095"N	80°48'15.756"W	320.57	206.707	1.47	1.58	-2.08
4220.00	29.660	207.510	4143.04	-228.29	-326.36	-165.50	1630497.31	2693377.91	39°13'55.654"N	80°48'16.023"W	365.92	206.890	1.14	-0.85	-1.54
4314.00	30.900	207.050	4224.22	-257.61	-368.48	-187.22	1630475.59	2692957.78	39°13'55.235"N	80°48'16.291"W	413.31	206.934	1.34	1.32	-0.49
4404.00	30.270	205.640	4301.70	-286.51	-409.51	-207.54	1630455.27	2692547.75	39°13'54.827"N	80°48'16.542"W	459.10	206.876	1.06	-0.70	-1.57
4495.00	30.180	206.540	4380.33	-315.59	-450.65	-227.69	1630435.12	2692136.11	39°13'54.417"N	80°48'16.790"W	504.91	206.805	0.51	-0.10	0.99
4586.00	30.630	206.240	4458.81	-344.64	-491.91	-248.16	1630414.63	2691723.36	39°13'54.004"N	80°48'17.043"W	550.96	206.770	0.57	0.49	0.13
4677.00	30.030	204.750	4537.36	-374.16	-533.38	-267.94	1630394.87	2691308.89	39°13'53.594"N	80°48'17.286"W	596.90	206.672	1.06	-0.66	-1.64
4768.00	30.330	205.760	4616.02	-403.71	-574.76	-287.46	1630375.35	2690895.52	39°13'53.182"N	80°48'17.527"W	642.63	206.572	0.65	0.33	1.11
4858.00	29.700	208.090	4693.96	-431.78	-614.89	-307.83	1630354.98	2690493.38	39°13'52.782"N	80°48'17.778"W	687.64	206.594	1.47	-0.70	2.59
4949.00	28.210	207.590	4773.58	-458.68	-653.85	-328.41	1630334.40	2690104.43	39°13'52.394"N	80°48'18.032"W	731.69	206.669	1.66	-1.64	-0.55
5043.00	28.310	206.240	4856.38	-486.42	-693.56	-348.57	1630314.24	2689707.75	39°13'51.998"N	80°48'18.283"W	776.19	206.684	0.67	1.11	1.34
5133.00	29.140	206.980	4935.30	-513.56	-732.19	-367.96	1630294.85	2689320.09	39°13'51.615"N	80°48'18.520"W	819.45	206.682	1.00	0.92	0.78
5225.00	30.290	206.320	5015.20	-542.16	-772.94	-388.41	1630274.40	2688911.33	39°13'51.209"N	80°48'18.773"W	865.05	206.680	1.30	1.25	-0.72
5316.00	31.530	207.330	5093.27	-571.36	-814.65	-409.51	1630253.30	2688496.63	39°13'50.794"N	80°48'19.033"W	911.79	206.688	1.48	1.36	1.11
5407.00	30.520	207.200	5171.26	-600.38	-856.35	-431.00	1630231.82	2688079.94	39°13'50.379"N	80°48'19.299"W	958.69	206.716	1.11	-1.11	-0.14
5499.00	30.580	207.970	5250.49	-629.10	-897.78	-452.64	1630210.17	2687706.50	39°13'49.966"N	80°48'19.566"W	1005.43	206.756	0.43	0.04	0.84
5590.00	29.870	209.190	5329.13	-656.60	-937.99	-474.55	1630188.27	2687262.29	39°13'49.565"N	80°48'19.837"W	1051.20	206.836	1.01	-0.76	1.34
5680.00	29.260	207.960	5407.41	-683.27	-976.99	-495.79	1630167.03	2686877.30	39°13'49.177"N	80°48'20.100"W	1095.59	206.906	0.96	-0.68	-1.37
5772.00	30.100	205.340	5487.35	-711.84	-1017.70	-516.21	1630146.61	2686446.59	39°13'48.772"N	80°48'20.351"W	1141.13	206.895	1.68	0.91	-2.85
5862.00	30.470	206.190	5565.06	-740.85	-1058.57	-535.94	1630126.88	2686055.72	39°13'48.365"N	80°48'20.595"W	1186.51	206.852	0.63	0.41	0.94
5953.00	29.920	208.230	5643.72	-769.20	-1099.27	-556.86	1630105.97	2685665.02	39°13'47.960"N	80°48'20.853"W	1232.27	206.865	1.28	-0.60	0.74
5983.00	29.680	209.460	5669.75	-778.10	-1112.33	-564.05	1630098.77	2685511.96	39°13'47.830"N	80°48'20.942"W	1247.17	206.889	2.19	-0.80	4.10
6025.00	28.930	209.960	5706.38	-790.12	-1130.19	-574.23	1630088.59	2685341.10	39°13'47.652"N	80°48'21.068"W	1267.70	206.935	1.88	-1.79	1.19
6115.00	29.200	208.690	5785.04	-815.92	-1168.31	-595.65	1630067.18	2684955.99	39°13'47.272"N	80°48'21.333"W	1311.39	207.014	0.75	0.30	-1.41
6204.00	30.990	208.580	5862.04	-842.69	-1207.47	-617.03	1630045.79	2684566.82	39°13'46.882"N	80°48'21.597"W	1355.99	207.067	2.01	2.01	-0.12
6293.00	31.000	208.130	5938.09	-878.00	-1248.16	-638.94	1630023.84	2684161.14	39°13'46.478"N	80°48'21.861"W	1402.21	207.110	0.75	0.61	0.51

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REFERENCE WELLPATH IDENTIFICATION

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

WELLPATH DATA (208 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]
6383.00	31.660	208.320	6014.72	-899.18	-1289.75	-661.31	1630001.52	268374.55	39°13'46.062"N	80°48'22.145"W	1449.40	207.146	0.13	0.07	0.21
6473.00	31.920	207.580	6091.22	-928.07	-1331.63	-683.53	1629979.30	268332.67	39°13'45.645"N	80°48'22.419"W	1496.81	207.172	0.52	0.29	-0.82
6562.00	32.020	210.230	6166.73	-956.15	-1372.87	-706.30	1629956.52	268291.43	39°13'45.234"N	80°48'22.701"W	1543.90	207.225	1.58	0.11	2.98
6652.00	32.950	226.990	6242.80	-977.73	-1410.26	-736.27	1629926.55	268254.04	39°13'44.860"N	80°48'23.075"W	1590.89	207.568	10.03	1.03	18.62
6741.00	33.090	241.850	6317.55	-986.97	-1438.28	-775.46	1629887.37	268226.03	39°13'44.578"N	80°48'23.508"W	1634.01	207.332	3.06	0.16	16.70
6831.00	36.420	249.020	6391.51	-986.89	-1459.45	-822.10	1629840.73	268204.86	39°13'44.362"N	80°48'24.157"W	1675.06	209.392	5.85	3.70	7.97
6920.00	41.800	261.690	6460.66	-976.96	-1473.23	-876.24	1629786.59	268191.08	39°13'44.218"N	80°48'24.842"W	1714.12	210.743	10.80	6.04	14.24
7009.00	46.360	274.060	6524.70	-953.23	-1475.24	-937.86	1629724.97	268189.07	39°13'44.189"N	80°48'25.625"W	1748.12	212.446	10.92	5.12	13.90
7099.00	50.820	282.530	6584.27	-916.59	-1465.35	-1004.50	1629658.34	268198.96	39°13'44.277"N	80°48'26.473"W	1776.59	214.431	8.62	4.96	9.41
7188.00	55.700	290.450	6637.55	-869.75	-1444.99	-1072.73	1629590.11	268219.32	39°13'44.699"N	80°48'27.344"W	1799.65	216.589	3.99	5.38	5.90
7278.00	61.220	297.580	6684.65	-812.27	-1413.69	-1142.64	1629520.20	268250.62	39°13'44.768"N	80°48'28.238"W	1817.73	218.948	9.12	6.13	7.92
7368.00	66.090	304.770	6724.62	-745.68	-1371.90	-1211.51	1629451.34	268292.41	39°13'45.171"N	80°48'29.121"W	1830.26	221.447	8.97	5.41	7.99
7457.00	68.120	311.810	6759.28	-672.80	-1321.11	-1275.78	1629387.07	268343.19	39°13'45.664"N	80°48'29.947"W	1836.56	224.000	7.63	2.28	7.91
7547.00	72.850	317.840	6789.36	-593.47	-1261.31	-1335.85	1629327.00	268402.99	39°13'46.246"N	80°48'30.721"W	1837.23	226.644	8.21	5.26	6.70
7637.00	76.390	324.020	6811.73	-509.16	-1193.65	-1390.70	1629272.15	268440.64	39°13'46.907"N	80°48'31.431"W	1832.72	229.360	7.05	6.14	6.87
7726.00	84.790	331.290	6824.77	-422.04	-1119.34	-1437.71	1629225.15	268544.95	39°13'47.635"N	80°48'32.042"W	1822.06	232.097	10.82	7.20	8.17
7816.00	88.000	337.880	6830.43	-332.29	-1038.35	-1476.42	1629186.44	268625.94	39°13'48.429"N	80°48'32.548"W	1804.99	234.882	7.85	3.57	7.01
7905.00	88.060	337.880	6833.49	-243.41	-956.03	-1510.11	1629152.74	268708.25	39°13'49.238"N	80°48'32.992"W	1787.30	237.663	0.32	0.07	0.31
7995.00	88.080	338.060	6836.59	-153.55	-872.65	-1543.85	1629119.01	268791.63	39°13'50.057"N	80°48'33.436"W	1773.42	240.523	0.21	-0.07	0.20
8084.00	89.970	343.040	6838.23	-64.66	-790.05	-1576.93	1629085.93	268844.25	39°13'50.889"N	80°48'33.879"W	1763.71	243.489	2.13	2.11	0.26
8174.00	89.970	343.040	6838.35	25.30	-708.10	-1614.05	1629048.81	268956.18	39°13'51.673"N	80°48'34.358"W	1762.54	246.313	5.90	0.10	-5.90
8263.00	89.910	343.120	6838.44	114.19	-629.05	-1654.95	1629007.92	269035.22	39°13'52.449"N	80°48'34.893"W	1770.47	249.188	0.76	-0.07	-0.75
8353.00	90.060	343.850	6838.47	204.08	-549.16	-1696.39	1628966.47	269115.11	39°13'53.232"N	80°48'35.434"W	1783.06	252.062	0.62	0.17	0.60
8442.00	90.490	344.440	6838.09	293.02	-469.55	-1736.18	1628926.69	269194.72	39°13'54.013"N	80°48'35.954"W	1798.55	254.866	1.40	0.42	1.34
8532.00	90.490	344.440	6837.36	382.72	-385.59	-1768.26	1628884.60	269278.67	39°13'54.838"N	80°48'36.378"W	1809.82	257.698	11.21	6.07	11.23
8621.00	90.860	346.010	6836.31	470.56	-299.75	-1791.72	1628841.15	269364.51	39°13'55.683"N	80°48'36.692"W	1816.62	260.503	1.39	0.42	1.33
8711.00	90.860	346.090	6834.96	559.73	-213.64	-1817.80	1628845.07	269450.27	39°13'56.531"N	80°48'37.039"W	1830.31	263.297	4.80	0.00	-4.80
8800.00	91.080	349.160	6833.46	648.42	-129.98	-1848.12	1628814.75	269534.22	39°13'57.353"N	80°48'37.440"W	1852.69	265.977	2.07	0.25	-2.06
8889.00	90.650	337.550	6832.11	737.30	-47.27	-1880.94	1628781.93	269616.98	39°13'58.166"N	80°48'37.872"W	1881.54	268.560	1.87	-0.48	-1.81
8979.00	90.580	333.210	6831.15	827.27	-34.52	-1948.43	1628744.43	269698.71	39°13'58.989"N	80°48'38.364"W	1918.74	271.493	4.82	0.08	-4.82

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REFERENCE WELLPATH IDENTIFICATION

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

WELLPATH DATA (208 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]
9068.00	90.710	330.850	6830.14	916.10	113.12	-1960.16	1628702.71	269777.36	39°13'59.739"N	80°48'38.909"W	1963.42	273.303	2.66	0.15	-2.65
9158.00	90.620	329.450	6829.10	1005.70	191.17	-2004.95	1628657.92	269855.41	39°14'00.504"N	80°48'39.492"W	2014.05	275.447	1.56	-0.10	-1.56
9247.00	90.620	328.970	6828.14	1094.16	267.62	-2050.51	1628612.37	269931.86	39°14'01.253"N	80°48'40.085"W	2067.90	277.436	0.54	0.00	-0.54
9337.00	90.680	329.060	6827.11	1183.58	344.77	-2096.84	1628566.04	270009.01	39°14'02.009"N	80°48'40.688"W	2124.99	279.337	0.12	0.07	0.10
9426.00	90.390	332.400	6826.14	1272.46	422.39	-2140.35	1628522.34	270086.63	39°14'02.770"N	80°48'41.286"W	2181.63	281.164	3.75	-0.11	3.75
9516.00	90.680	335.710	6825.15	1362.21	503.30	-2179.71	1628483.17	270167.54	39°14'03.564"N	80°48'41.771"W	2237.07	283.002	3.68	0.11	3.68
9605.00	90.550	333.900	6824.19	1451.19	583.83	-2217.60	1628445.29	270248.06	39°14'04.354"N	80°48'42.267"W	2293.16	284.750	2.04	-0.15	-2.03
9695.00	90.580	332.740	6823.30	1541.12	664.24	-2258.00	1628404.88	270328.47	39°14'05.143"N	80°48'42.796"W	2353.68	286.392	1.29	0.03	-1.29
9784.00	90.650	333.380	6822.35	1630.04	743.58	-2298.32	1628364.56	270407.80	39°14'05.921"N	80°48'43.323"W	2415.62	287.928	0.72	0.08	0.72
9874.00	90.770	335.860	6821.23	1720.01	824.88	-2336.89	1628325.96	270489.10	39°14'06.719"N	80°48'43.828"W	2478.21	289.442	2.76	0.13	2.76
9963.00	90.710	337.870	6820.08	1808.98	906.71	-2371.86	1628291.03	270570.93	39°14'07.523"N	80°48'44.287"W	2539.26	290.921	2.26	-0.07	2.26
10053.00	90.680	334.010	6818.99	1898.95	988.87	-2408.54	1628254.35	270653.08	39°14'08.330"N	80°48'44.769"W	2603.64	292.322	4.29	-0.03	-4.29
10143.00	91.080	335.790	6817.61	1988.93	1070.36	-2446.71	1628216.18	270734.57	39°14'09.129"N	80°48'45.269"W	2670.59	293.628	2.03	0.44	1.98
10232.00	91.020	338.140	6815.98	2077.88	1152.24	-2481.53	1628181.37	270816.45	39°14'09.934"N	80°48'45.777"W	2735.99	294.907	2.64	-0.07	2.64
10322.00	91.110	339.310	6814.30	2167.72	1236.09	-2514.18	1628148.72	270900.30	39°14'10.758"N	80°48'46.157"W	2801.61	296.161	1.30	0.40	1.30
10411.00	90.980	337.670	6812.68	2256.58	1318.90	-2546.74	1628116.16	270983.10	39°14'11.571"N	80°48'46.586"W	2867.99	297.379	1.75	-0.15	-1.74
10501.00	91.080	336.340	6811.06	2346.53	1401.76	-2581.83	1628081.07	271065.96	39°14'12.385"N	80°48'47.047"W	2937.82	298.499	1.58	0.11	-1.58
10590.00	90.310	335.380	6809.98	2435.52	1482.97	-2618.22	1628044.68	271147.17	39°14'13.182"N	80°48'47.525"W	3009.04	299.527	1.38	-0.87	-1.08
10679.00	89.690	334.800	6809.98	2524.51	1563.69	-2655.71	1628007.19	271227.88	39°14'13.975"N	80°48'48.016"W	3081.87	300.490	0.95	-0.70	-0.65
10769.00	89.900	334.400	6810.47	2614.50	1645.01	-2694.28	1627968.62	271309.19	39°14'14.772"N	80°48'48.522"W	3156.77	301.406	0.40	0.00	-0.40
10858.00	89.990	333.940	6810.95	2703.48	1725.13	-2733.03	1627929.87	271389.31	39°14'15.559"N	80°48'49.029"W	3231.95	302.261	0.56	0.00	-0.56
10948.00	89.780	333.370	6811.37	2793.43	1805.78	-2772.97	1627889.93	271469.96	39°14'16.350"N	80°48'49.551"W	3309.11	303.072	0.64	0.10	-0.63
11038.00	90.340	334.520	6810.27	2883.40	1886.63	-2812.50	1627850.41	271550.81	39°14'17.144"N	80°48'50.069"W	3386.67	303.854	1.42	0.62	1.28
11127.00	90.950	333.810	6809.27	2972.36	1966.73	-2851.28	1627811.63	271630.90	39°14'17.930"N	80°48'50.577"W	3463.79	304.597	1.05	0.69	-0.80
11217.00	91.920	332.280	6808.80	3062.27	2046.94	-2892.07	1627770.84	271711.11	39°14'18.716"N	80°48'51.110"W	3543.17	305.290	1.70	-0.35	-1.70
11307.00	91.890	333.430	6807.38	3152.16	2127.01	-2933.13	1627729.78	271791.18	39°14'19.502"N	80°48'51.646"W	3623.18	305.948	1.28	-0.03	1.28
11396.00	90.430	333.540	6806.36	3241.10	2206.65	-2972.86	1627690.05	271870.81	39°14'20.283"N	80°48'52.166"W	3702.32	306.585	0.53	-0.52	0.12
11486.00	90.820	335.270	6805.16	3331.08	2287.79	-3011.77	1627651.14	271951.96	39°14'21.079"N	80°48'52.676"W	3782.17	307.221	1.99	-0.68	1.87
11575.00	90.910	338.620	6806.37	3420.04	2369.66	-3046.66	1627616.26	272033.82	39°14'21.883"N	80°48'53.134"W	3859.71	307.875	3.82	0.10	3.82
11665.00	90.940	339.880	6806.49	3509.81	2453.82	-3078.55	1627584.37	272117.97	39°14'22.710"N	80°48'53.595"W	3936.84	308.557	3.50	0.05	3.39

Environmental Protection

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REFERENCE WELLPATH IDENTIFICATION

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

WELLPATH DATA (208 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]
11754.00	89.320	337.620	6807.06	3598.69	2536.75	-3110.81	1627552.11	272200.91	39°14'23.525"N	80°48'53.981"W	4014.01	309.196	2.62	-0.70	-2.53
11843.00	89.380	336.130	6808.07	3687.66	2618.60	-3145.76	1627517.16	272282.75	39°14'24.329"N	80°48'54.440"W	4093.03	309.775	1.68	0.07	-1.67
11933.00	89.380	336.810	6809.05	3777.64	2701.11	-3181.69	1627481.23	272365.25	39°14'25.139"N	80°48'54.912"W	4173.62	310.330	0.76	0.00	0.76
12023.00	89.450	337.130	6809.97	3867.60	2783.93	-3216.90	1627446.02	272448.07	39°14'25.953"N	80°48'55.375"W	4254.26	310.873	0.36	0.08	0.36
12112.00	89.750	339.480	6810.54	3936.49	2866.62	-3249.79	1627415.13	272530.76	39°14'26.765"N	80°48'55.808"W	4333.43	311.415	2.06	0.44	2.64
12202.00	90.150	339.630	6810.67	4046.26	2950.95	-3281.23	1627381.69	272615.09	39°14'27.594"N	80°48'56.223"W	4413.00	311.966	0.47	0.44	0.17
12291.00	90.030	339.250	6810.53	4135.05	3034.28	-3312.49	1627350.44	272698.41	39°14'28.413"N	80°48'56.636"W	4492.15	312.490	0.45	-0.13	-0.43
12381.00	89.850	335.310	6810.62	4224.99	3117.28	-3347.24	1627315.69	272781.41	39°14'29.228"N	80°48'57.093"W	4574.00	312.963	4.38	-0.20	-4.38
12470.00	89.940	332.570	6810.78	4313.95	3197.22	-3386.34	1627276.59	272861.35	39°14'30.013"N	80°48'57.605"W	4657.20	313.355	3.08	0.10	-3.08
12560.00	89.940	334.490	6810.88	4403.89	3277.78	-3426.45	1627236.48	272941.91	39°14'30.803"N	80°48'58.130"W	4741.77	313.740	2.13	0.40	2.13
12649.00	89.690	338.660	6811.16	4492.85	3359.43	-3461.82	1627201.11	273023.55	39°14'31.605"N	80°48'58.595"W	4823.90	314.140	4.69	-0.28	4.69
12739.00	89.820	343.100	6811.55	4582.43	3444.44	-3491.30	1627171.64	273108.56	39°14'32.441"N	80°48'58.985"W	4904.42	314.613	4.94	0.14	4.93
12828.00	89.660	344.650	6811.95	4670.48	3529.94	-3516.01	1627146.92	273194.05	39°14'33.282"N	80°48'59.315"W	4982.25	315.113	1.75	-0.18	1.74
12918.00	89.750	343.680	6812.42	4759.44	3616.52	-3540.57	1627122.36	273280.63	39°14'34.134"N	80°48'59.643"W	5061.11	315.608	1.08	0.10	-1.08
13007.00	89.780	339.430	6812.78	4847.93	3700.93	-3568.72	1627094.31	273365.04	39°14'34.964"N	80°49'00.017"W	5141.27	316.047	4.76	0.85	4.78
13097.00	89.720	336.200	6813.17	4937.84	3784.25	-3602.70	1627060.24	273448.36	39°14'35.783"N	80°49'00.464"W	5224.94	316.408	3.59	-0.07	-3.59
13187.00	89.850	332.960	6813.51	5027.82	3865.54	-3641.31	1627021.62	273529.64	39°14'36.581"N	80°49'00.970"W	5310.51	316.711	3.58	0.14	-3.58
13276.00	89.910	331.500	6813.70	5116.67	3944.31	-3682.74	1626980.20	273608.41	39°14'37.353"N	80°49'01.511"W	5396.31	316.964	1.62	0.07	-1.62
13366.00	89.850	325.000	6813.89	5205.99	4021.14	-3729.54	1626933.40	273685.23	39°14'38.106"N	80°49'02.120"W	5484.43	317.155	6.41	-0.07	-6.41
13455.00	89.780	336.360	6814.18	5293.75	4094.82	-3779.15	1626888.49	273758.92	39°14'38.827"N	80°49'02.768"W	5572.46	317.297	9.77	-0.08	9.76
13545.00	90.180	327.550	6814.21	5382.68	4170.02	-3828.90	1626834.05	273834.11	39°14'39.563"N	80°49'03.411"W	5661.23	317.442	1.56	0.44	1.50
13635.00	90.150	328.630	6813.95	5471.90	4246.30	-3876.65	1626786.29	273910.39	39°14'40.310"N	80°49'04.032"W	5749.74	317.606	1.33	-0.03	1.33
13724.00	90.120	331.700	6813.74	5560.50	4323.46	-3920.98	1626741.97	273987.55	39°14'41.066"N	80°49'04.610"W	5836.65	317.795	3.54	-0.03	3.54
13814.00	89.600	333.500	6813.96	5650.37	4403.27	-3962.57	1626700.38	274067.36	39°14'41.848"N	80°49'05.153"W	5923.75	318.015	1.82	-0.58	1.72
13903.00	89.800	332.000	6814.98	5739.25	4482.32	-4003.46	1626659.59	274146.46	39°14'42.624"N	80°49'05.687"W	6009.90	318.236	1.47	0.38	1.35
13993.00	88.650	333.000	6816.77	5829.13	4562.25	-4044.77	1626618.19	274226.33	39°14'43.408"N	80°49'06.227"W	6097.07	318.441	1.46	-0.48	1.38
4083.00	88.550	336.800	6818.97	5919.08	4643.81	-4082.74	1626580.22	274307.88	39°14'44.208"N	80°49'06.775"W	6183.34	318.679	3.88	-0.11	3.88
4172.00	88.550	337.890	6821.32	6008.01	4725.91	-4117.02	1626545.94	274389.98	39°14'45.015"N	80°49'07.126"W	6267.70	318.939	1.25	0.00	1.25
4262.00	88.710	338.010	6823.27	6097.90	4809.30	-4150.80	1626512.16	274473.37	39°14'45.834"N	80°49'07.621"W	6352.83	319.203	0.22	0.18	0.13
4351.00	88.310	340.510	6825.45	6186.87	4892.50	-4182.30	1626480.66	274556.57	39°14'46.651"N	80°49'08.137"W	6436.44	319.475	2.81	-0.11	2.81

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Actual Wellpath Report

OXF-97A-HS AWP Proj: 16766'
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REFERENCE WELLPATH IDENTIFICATION

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

WELLPATH DATA (208 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]
14441.00	88.950	339.780	6827.37	6276.35	4977.13	-4212.86	1626450.10	274641.20	39°14'47.483"N	80°49'08.441"W	6520.74	319.754	0.89	0.38	-0.81
14530.00	88.950	341.190	6829.00	6365.00	5061.01	-4242.59	1626420.37	274725.06	39°14'48.308"N	80°49'08.835"W	6604.04	320.027	1.58	0.00	1.58
14619.00	88.890	341.950	6830.68	6453.48	5145.43	-4270.72	1626392.24	274809.48	39°14'49.138"N	80°49'09.208"W	6686.89	320.307	0.86	-0.07	0.85
14709.00	88.800	336.270	6832.49	6543.25	5229.46	-4302.79	1626360.17	274893.51	39°14'49.964"N	80°49'09.631"W	6772.09	320.552	6.31	-0.10	-6.31
14799.00	88.830	334.550	6834.35	6633.23	5311.27	-4340.23	1626322.73	274975.32	39°14'50.767"N	80°49'10.122"W	6859.10	320.744	1.97	0.03	1.97
14888.00	88.950	334.480	6836.08	6722.20	5391.60	-4378.52	1626284.44	275055.65	39°14'51.555"N	80°49'10.624"W	6945.56	320.920	0.16	0.13	-0.08
14978.00	88.860	336.640	6837.80	6812.17	5473.52	-4415.75	1626247.22	275137.56	39°14'52.360"N	80°49'11.112"W	7032.65	321.105	2.40	-0.10	2.40
15067.00	89.010	336.340	6839.45	6901.14	5555.11	-4451.25	1626211.72	275219.15	39°14'53.161"N	80°49'11.579"W	7118.49	321.295	0.38	0.17	-0.34
15156.00	89.050	336.200	6840.96	6990.12	5636.58	-4487.06	1626175.91	275300.61	39°14'53.961"N	80°49'12.049"W	7204.49	321.478	0.16	0.04	-0.16
15246.00	88.830	338.260	6842.62	7080.11	5718.61	-4524.04	1626138.93	275382.04	39°14'54.766"N	80°49'12.529"W	7291.74	321.662	1.07	0.34	1.04
15336.00	88.950	331.210	6844.37	7170.00	5798.93	-4564.56	1626098.42	275462.96	39°14'55.554"N	80°49'13.064"W	7379.89	321.792	4.50	0.13	-4.50
15425.00	88.830	328.140	6846.09	7258.52	5875.73	-4609.48	1626053.49	275539.76	39°14'56.306"N	80°49'13.650"W	7468.03	321.886	3.45	-0.13	-3.45
15515.00	88.920	331.800	6847.86	7348.07	5953.62	-4654.50	1626008.47	275617.65	39°14'57.070"N	80°49'14.236"W	7557.12	321.982	4.07	0.10	4.07
15604.00	88.950	334.700	6849.51	7436.97	6033.08	-4694.55	1625968.43	275697.10	39°14'57.849"N	80°49'14.760"W	7644.40	322.112	3.26	0.03	3.26
15694.00	88.930	334.430	6851.16	7526.95	6114.34	-4733.20	1625929.78	275778.36	39°14'58.677"N	80°49'15.267"W	7732.29	322.246	0.50	0.08	-0.30
15783.00	88.860	335.580	6852.86	7615.93	6194.99	-4770.80	1625892.18	275859.00	39°14'59.438"N	80°49'15.760"W	7819.10	322.400	1.30	-0.10	1.29
15873.00	88.890	333.640	6854.63	7705.89	6276.27	-4809.38	1625853.60	275940.29	39°15'00.236"N	80°49'16.265"W	7907.07	322.538	2.16	0.03	-2.16
15963.00	88.830	334.870	6856.40	7794.85	6356.42	-4848.03	1625814.95	276020.43	39°15'01.022"N	80°49'16.771"W	7994.22	322.667	1.38	-0.07	1.38
16053.00	88.550	334.080	6858.46	7884.81	6437.62	-4886.80	1625776.19	276101.62	39°15'01.819"N	80°49'17.279"W	8082.31	322.798	0.93	-0.31	-0.88
16143.00	88.580	334.490	6860.69	7973.75	6517.44	-4926.10	1625738.88	276181.44	39°15'02.602"N	80°49'17.794"W	8169.67	322.917	0.66	0.05	0.66
16233.00	88.210	334.010	6863.21	8063.67	6598.12	-4965.89	1625697.10	276262.12	39°15'03.394"N	80°49'18.315"W	8258.05	323.034	0.71	-0.41	0.58
16323.00	88.370	333.700	6865.86	8152.60	6678.04	-5004.97	1625658.02	276342.04	39°15'04.178"N	80°49'18.826"W	8345.42	323.150	0.24	0.18	-0.16
16413.00	88.220	334.470	6868.28	8241.54	6758.10	-5043.77	1625619.23	276422.10	39°15'04.964"N	80°49'19.334"W	8432.77	323.265	0.65	0.17	0.63
16503.00	88.490	334.930	6870.63	8331.50	6839.66	-5081.74	1625581.25	276503.65	39°15'05.764"N	80°49'19.839"W	8520.86	323.388	1.33	-0.03	1.33
16593.00	88.580	334.640	6872.90	8420.47	6920.95	-5117.95	1625545.04	276584.92	39°15'06.562"N	80°49'20.368"W	8607.71	323.517	6.80	0.10	0.80
16683.00	88.350	334.710	6875.16	8510.40	7003.82	-5152.93	1625510.07	276666.81	39°15'07.376"N	80°49'20.768"W	8695.18	323.657	1.74	-0.03	1.74
16773.00	88.460	333.620	6876.83	8574.29	7063.40	-5176.25	1625486.74	276747.38	39°15'07.961"N	80°49'21.076"W	8757.01	323.765	2.21	-0.14	2.20
16863.00	88.460	333.320	6877.47	8598.22	7085.84	-5184.73	1625478.27	276749.82	39°15'08.182"N	80°49'21.187"W	8780.12	323.807	0.00	0.00	0.00

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Actual Wellpath Report

OXF-97A-HS AWP Proj: 16766'
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REFERENCE WELLPATH IDENTIFICATION

Operator	NOBLE ENERGY	Slot	Slot A
Area	Doddridge Co., WV	Well	OXF-97A-HS
Field	Doddridge	Wellbore	OXF-97A-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-97A-HS LP Rev-1		6826.70	-909.73	-1527.86	1629135.00	268754.55	39°13'49.693"N	80°48'33.226"W	point
OXF-97A-HS LP Rev-2		6830.00	-1046.22	-1465.63	1629197.23	268618.07	39°13'48.353"N	80°48'32.410"W	point
OXF-97A-HS BHL Rev-2		6865.00	7097.29	-5178.56	1625484.44	276761.27	39°15'08.296"N	80°49'21.111"W	point
OXF-97 LL		7198.45	0.03	-0.03	1630662.77	269664.28	39°13'58.904"N	80°48'13.980"W	polygon

WELLPATH COMPOSITION - Ref Wellbore: OXF-97A-HS AWB Ref Wellpath: OXF-97A-HS AWP Proj: 16766'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	2918.00	Generic gyro - northseeking (Standard)	01_Gyrodata MS Gyro <12-1/4"> (100'-2900')	OXF-97A-HS AWB
2918.00	5983.00	ISCWSA MWD, Rev. 2 (Standard)	02_Scientific EM <8-3/4"> (2910')(2967'-5975')	OXF-97A-HS AWB
5983.00	16742.00	NaviTrak (AT Curve Short Spaced)	03_BHI AT Curve <8-1/2"> (5983')(6025'-16742')	OXF-97A-HS AWB
16742.00	16742.00	Blind Drilling (std)	Projection to bit	OXF-97A-HS AWB

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 OXF-97A-HS AWP Proj: 16766'
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REFERENCE WELLPATH IDENTIFICATION

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

COMMENTS

Wellpath general comments
 API: 47-017-06481-0000
 BHI Job #: 7176330
 Rig: Precision 543
 Duration: 4/15/2015-4/20/2015
 Gyrodatta MS Gyro <12-1/4"> (100'-2900')
 Scientific EM <8-3/4"> (2910')(2967'-5975')
 BHI AT Curve <8-1/2"> (5983')(6025'-16742')
 Projected MD at TD: 16766'

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NOBLE ENERGY

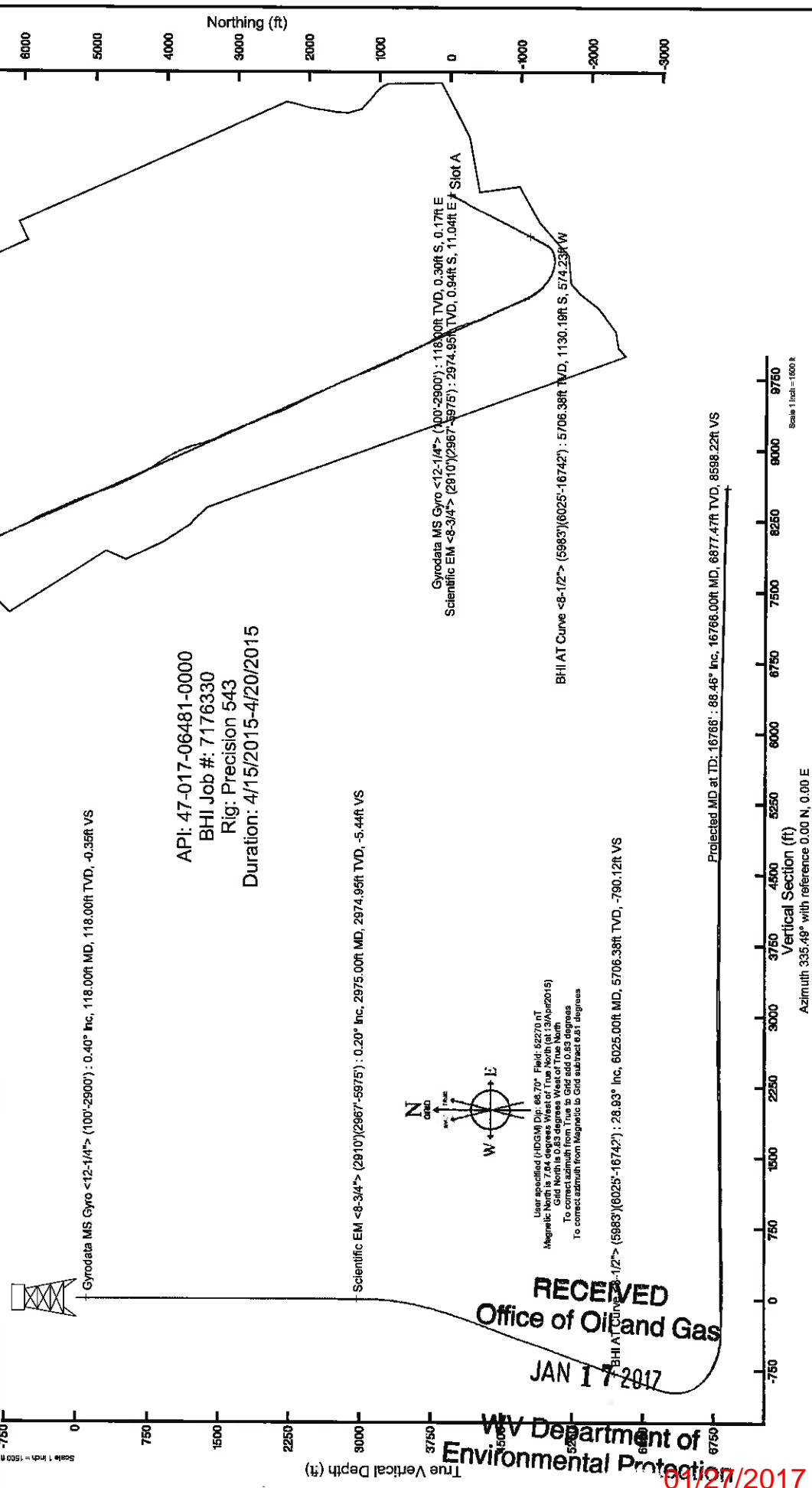


Location: Doddridge Co., WV
 Field: Doddridge
 Facility: OXF-97 Pad

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

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
OXF-97 Pad	1930892.770	260084.280	80°48'13.880"W
Slot	Local N (ft)	Grid North (US ft)	Longitude
Slot A	-0.03	260084.250	80°48'13.880"W
Precision 643 (RKB) to Mad line (AI Slot Slot A)			16ft
Mean Sea Level to Mad line (AI Slot Slot A)			-1333.46ft
Precision 643 (RKB) to Mean Sea Level			1351.46ft

Grid System: NAD83 / Lambert West Virginia 97, Northern Zone (F00), US feet
 North Reference: GRS north
 Precision 643 (RKB) to Mean Sea Level: 1351.46 feet
 Mean Sea Level to Mad line (AI Slot Slot A): -1333.46 feet
 Coordinates are to feet referenced to BNA
 Created by: shahjari on 04/04/2015



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