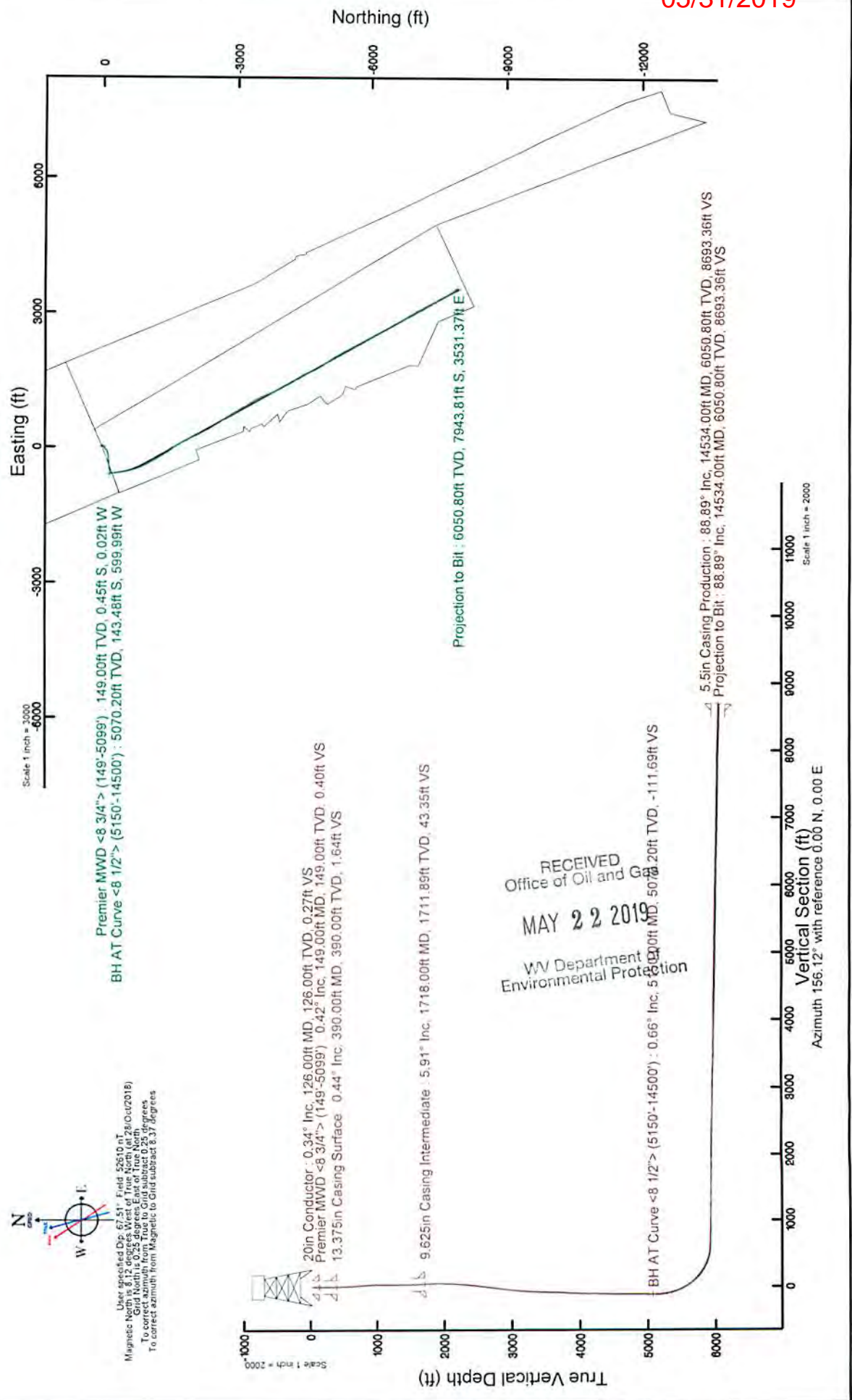


Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude
Benjamin Honecker OHI Pad	1749038.530	1458332.530	40°09'17.198"N
Slot	Local E (ft)	Grid North (US ft)	Longitude
Slot 6H	-26.78	1749030.360	80°36'40.524"W
SDC 42 (RKB) to Ground level (At Slot: Slot 6H)	-8.17	14583305.755	40°09'16.934"N
Mean Sea Level to Ground level (At Slot: Slot 6H)			26ft
SDC 42 (RKB) to Mean Sea Level			-1104ft
Comments			
API: 47-059-00243-0000			
BH Job #: 109466020			
Rig: SDC 42			
Duration: 10/29/2018 - 11/01/2018			



SOUTHWESTERN ENERGY	
Location: Ohio County, WV	Slot: 6H
Field: Ohio	Well: Benjamin Honecker OHI 6H
Facility: Benjamin Honecker OHI Pad/Velbore	Benjamin Honecker OHI 6H PWB
Plot reference wellpath is Benjamin Honecker OHI 6H PWP Rev-B.g Grid System: NAD83 / UTM Zone 17 North, US feet	
True vertical depths are referenced to SDC 42 (RKB)	
Scale: True distance	
Depths are in feet	
Created by: alyen on 2018-11-16	
Database: WA_MPL_EASTERNUS_Defn	
Coordinates are in feet referenced to Slot	



User specified Dip: 67.51° Field: 52610 on 8/02/2018
Magnetic North is 2.25 degrees East of True North
Grid North is 0.25 degrees East of True North
To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid subtract 6.37 degrees

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY		Slot	Slot 6H
Area	Ohio County, WV		Well	Benjamin Honecker OHI 6H
Field	Ohio		Wellbore	Benjamin Honecker OHI 6H AWP
Facility	Benjamin Honecker OHI Pad			

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect@ 5.1	
North Reference	Grid	User	Atenjen	
Scale	0.999613	Report Generated	16/Nov/2018 at 14:16	
Convergence at slot	0.25° East	Database/Source file	WA_MPL_EASTERNU Defn/Benjamin_Honecker_OHI_6H_AWP_Proj_14534_.xml	

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-26.78	-8.17	1749030.36	14583305.76	40°09'16.934"N	80°36'40.631"W
Facility Reference Pt			1749038.53	14583332.53	40°09'17.198"N	80°36'40.524"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.478"W

WELLPATH DATUM

Calculation method	Minimum curvature	SDC 42 (RKB) to Facility Vertical Datum	1130.00ft
Horizontal Reference Pt	Slot	SDC 42 (RKB) to Mean Sea Level	1130.00ft
Vertical Reference Pt	SDC 42 (RKB)	SDC 42 (RKB) to Ground Level at Slot (Slot 6H)	26.00ft
MD Reference Pt	SDC 42 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	156.12°

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Environmental Protection

REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot 6H
SOUTHWESTERN ENERGY	Well	Benjamin Honecker OHI 6H
Ohio County, WV	Wellbore	Benjamin Honecker OHI 6H AWP
Ohio		
Benjamin Honecker OHI Pad		

WELLPATH DATA (169 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)	Built Rate (°/100ft)	Turn Rate (°/100ft)
0.00H	0.000	183.050	0.00	0.00	0.00	0.00	1749030.36	14583305.76	40°09'16.934"N	80°36'40.631"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	183.050	26.00	0.00	0.00	0.00	1749030.36	14583305.76	40°09'16.934"N	80°36'40.631"W	0.00	0.000	0.00	0.00	0.00
149.00	0.420	183.050	149.00	0.40	-0.45	-0.02	1749030.34	14583305.31	40°09'16.930"N	80°36'40.631"W	0.45	183.050	0.34	0.34	-143.86
241.00	0.270	138.190	241.00	0.91	-0.95	0.10	1749030.46	14583304.81	40°09'16.925"N	80°36'40.630"W	0.95	173.827	0.32	-0.16	-48.76
308.00	0.240	175.240	308.00	1.19	-1.21	0.22	1749030.58	14583304.55	40°09'16.922"N	80°36'40.628"W	1.23	169.686	0.25	-0.04	55.30
428.00	0.530	179.040	427.99	1.94	-2.01	0.25	1749030.61	14583303.75	40°09'16.914"N	80°36'40.628"W	2.03	172.925	0.24	0.24	3.17
519.00	2.190	184.030	518.97	3.86	-4.17	0.13	1749030.49	14583301.59	40°09'16.893"N	80°36'40.630"W	4.17	178.152	1.83	1.82	5.48
610.00	3.890	187.370	609.83	8.04	-8.96	-0.38	1749029.98	14583296.80	40°09'16.845"N	80°36'40.636"W	8.97	182.451	1.88	1.87	3.67
702.00	4.810	187.540	701.57	14.00	-15.88	-1.29	1749029.07	14583289.88	40°09'16.777"N	80°36'40.649"W	15.93	184.644	1.00	1.00	0.18
792.00	5.680	195.580	791.19	20.66	-23.91	-2.98	1749027.38	14583281.85	40°09'16.698"N	80°36'40.671"W	24.10	187.107	1.26	0.97	8.93
882.00	6.220	214.180	880.71	26.68	-32.24	-6.92	1749023.45	14583273.53	40°09'16.616"N	80°36'40.722"W	32.97	192.111	2.21	0.60	20.67
972.00	5.970	237.410	970.22	29.97	-38.79	-13.60	1749016.76	14583266.98	40°09'16.551"N	80°36'40.808"W	41.11	199.321	2.74	-0.28	25.81
1063.00	6.330	245.450	1060.70	30.74	-43.43	-22.15	1749008.22	14583262.35	40°09'16.506"N	80°36'40.919"W	48.75	207.026	1.02	0.40	8.84
1153.00	6.680	242.410	1150.12	31.14	-47.91	-31.30	1748999.07	14583257.86	40°09'16.462"N	80°36'41.037"W	57.23	213.159	0.55	0.39	-3.38
1243.00	6.960	244.280	1239.48	31.65	-52.70	-40.86	1748989.52	14583253.07	40°09'16.415"N	80°36'41.160"W	66.68	217.783	0.40	0.31	2.08
1334.00	6.640	241.560	1329.84	32.25	-57.60	-50.45	1748979.93	14583248.18	40°09'16.367"N	80°36'41.284"W	76.57	221.213	0.50	-0.35	-2.99
1425.00	5.670	235.270	1420.32	33.51	-62.67	-58.77	1748971.61	14583243.11	40°09'16.317"N	80°36'41.391"W	85.91	223.162	1.30	-1.07	-6.91
1515.00	5.640	229.140	1509.88	35.64	-68.09	-65.77	1748964.62	14583237.69	40°09'16.264"N	80°36'41.482"W	94.67	224.005	0.67	-0.03	-6.81
1606.00	5.570	225.320	1600.44	38.51	-74.12	-72.29	1748958.10	14583231.66	40°09'16.205"N	80°36'41.566"W	103.54	224.283	0.42	-0.08	-4.20
1663.00	5.680	218.330	1657.17	40.81	-78.28	-76.01	1748954.38	14583227.50	40°09'16.164"N	80°36'41.614"W	109.11	224.155	1.22	0.19	-12.26
1807.00	6.280	220.900	1800.39	47.49	-89.83	-85.58	1748944.81	14583215.96	40°09'16.050"N	80°36'41.738"W	124.07	223.615	0.46	0.42	1.78
1898.00	7.420	244.870	1890.75	49.74	-96.08	-94.16	1748936.23	14583209.71	40°09'15.989"N	80°36'41.849"W	134.53	224.422	3.35	1.25	26.34
1988.00	9.250	252.190	1979.80	49.10	-100.77	-106.31	1748924.09	14583205.03	40°09'15.943"N	80°36'42.006"W	146.48	226.535	2.35	2.03	8.13
2079.00	11.340	255.940	2069.33	46.80	-105.18	-121.96	1748908.45	14583200.62	40°09'15.900"N	80°36'42.208"W	161.05	229.225	2.41	2.30	4.12
2170.00	13.440	258.680	2158.21	42.98	-109.43	-141.01	1748899.41	14583196.37	40°09'15.859"N	80°36'42.453"W	178.49	232.188	2.40	2.31	3.01
2260.00	15.500	263.380	2245.35	37.13	-112.87	-163.21	1748867.21	14583192.93	40°09'15.826"N	80°36'42.739"W	198.44	235.335	2.63	2.29	5.22
2351.00	17.090	261.350	2332.70	30.01	-116.28	-188.51	1748841.92	14583189.52	40°09'15.793"N	80°36'43.065"W	221.49	238.333	1.86	1.75	-2.23
2441.00	17.830	264.790	2418.55	22.13	-119.52	-215.31	1748815.13	14583186.28	40°09'15.762"N	80°36'43.411"W	246.26	240.965	1.41	0.82	3.82
2531.00	18.790	266.840	2503.99	12.59	-121.57	-243.50	1748786.95	14583184.23	40°09'15.743"N	80°36'43.774"W	272.16	243.469	1.28	1.07	2.28
2621.00	20.390	264.630	2588.78	2.48	-123.84	-273.59	1748756.88	14583181.97	40°09'15.722"N	80°36'44.161"W	300.31	245.647	1.96	1.78	-2.46

REFERENCE WELLPATH IDENTIFICATION	
Operator	SOUTHWESTERN ENERGY
Area	Ohio County, WV
Field	Ohio
Facility	Benjamin Honecker OHI Pad
Slot	Slot 6H
Well	Benjamin Honecker OHI 6H
Wellbore	Benjamin Honecker OHI 6H AWP

WELLPATH DATA (169 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)
2711.00	19.600	266.540	2673.36	-7.76	-126.21	-304.27	1748726.21	14583179.59	40°09'15.700"N	80°36'44.557"W	329.41	247.471	1.14	-0.88	2.12
2802.00	19.750	267.790	2759.05	-18.77	-127.73	-334.87	1748695.62	14583178.08	40°09'15.686"N	80°36'44.951"W	358.40	249.122	0.49	0.16	1.37
2892.00	20.420	266.320	2843.57	-29.80	-129.32	-365.73	1748664.77	14583176.48	40°09'15.672"N	80°36'45.348"W	387.92	250.526	0.93	0.74	-1.63
2982.00	20.580	265.490	2927.87	-40.47	-131.57	-397.17	1748633.35	14583174.23	40°09'15.651"N	80°36'45.753"W	418.39	251.671	0.37	0.18	-0.92
3073.00	20.120	264.000	3013.19	-50.58	-134.47	-428.68	1748601.85	14583171.34	40°09'15.624"N	80°36'46.159"W	449.27	252.584	0.76	-0.51	-1.64
3163.00	19.540	261.020	3097.86	-59.20	-138.44	-458.94	1748571.60	14583167.37	40°09'15.586"N	80°36'46.549"W	479.36	253.214	1.29	-0.64	-3.31
3253.00	17.270	261.020	3183.25	-66.51	-142.87	-487.01	1748543.54	14583162.94	40°09'15.543"N	80°36'46.911"W	507.53	253.650	2.52	-2.52	0.00
3344.00	14.420	256.470	3270.79	-72.02	-147.63	-511.37	1748519.19	14583158.18	40°09'15.497"N	80°36'47.225"W	532.25	253.897	3.41	-3.13	-5.00
3434.00	11.100	255.560	3358.55	-75.46	-152.41	-530.66	1748499.91	14583153.40	40°09'15.451"N	80°36'47.474"W	552.11	253.975	3.70	-3.69	-1.01
3525.00	11.120	256.600	3447.85	-78.49	-156.63	-547.68	1748482.89	14583149.18	40°09'15.410"N	80°36'47.693"W	569.64	254.040	0.22	0.02	1.14
3615.00	6.070	256.600	3536.81	-80.93	-159.75	-560.76	1748469.82	14583146.07	40°09'15.380"N	80°36'47.862"W	583.07	254.099	5.61	-5.61	0.00
3705.00	4.410	261.210	3626.43	-82.70	-161.38	-568.81	1748461.77	14583144.44	40°09'15.364"N	80°36'47.966"W	591.26	254.160	1.90	-1.84	5.12
3795.00	4.070	277.110	3716.18	-85.25	-161.51	-575.40	1748455.19	14583144.30	40°09'15.363"N	80°36'48.050"W	597.64	254.321	1.35	-0.38	17.67
3886.00	4.580	289.610	3806.93	-89.41	-159.89	-582.02	1748448.56	14583145.92	40°09'15.379"N	80°36'48.136"W	603.59	254.639	1.17	0.56	13.74
3976.00	4.330	289.210	3896.65	-94.20	-157.57	-588.62	1748441.97	14583148.25	40°09'15.402"N	80°36'48.220"W	609.34	255.014	0.28	-0.28	-0.44
4066.00	3.550	285.450	3986.44	-98.29	-155.71	-594.51	1748436.08	14583150.11	40°09'15.421"N	80°36'48.296"W	614.57	255.323	0.91	-0.87	-4.18
4157.00	1.260	293.240	4077.36	-100.81	-154.57	-598.15	1748432.44	14583151.25	40°09'15.432"N	80°36'48.343"W	617.80	255.511	2.54	-2.52	8.56
4247.00	0.920	311.310	4167.34	-102.19	-153.70	-599.60	1748430.99	14583152.12	40°09'15.441"N	80°36'48.362"W	618.99	255.623	0.53	-0.38	20.08
4337.00	1.260	334.140	4257.32	-103.84	-152.33	-600.57	1748430.02	14583153.48	40°09'15.455"N	80°36'48.374"W	619.59	255.768	0.61	0.38	25.37
4428.00	1.480	339.230	4348.30	-106.01	-150.33	-601.43	1748429.17	14583155.48	40°09'15.474"N	80°36'48.385"W	619.93	255.966	0.28	0.24	5.59
4518.00	1.660	329.930	4438.26	-108.47	-148.12	-602.49	1748428.10	14583157.70	40°09'15.496"N	80°36'48.399"W	620.43	256.188	0.35	0.20	-10.33
4608.00	0.640	308.510	4528.24	-110.21	-146.68	-603.54	1748427.06	14583159.14	40°09'15.511"N	80°36'48.412"W	621.11	256.340	1.21	-1.13	-23.80
4698.00	0.090	158.500	4618.24	-110.58	-146.43	-603.91	1748426.69	14583159.38	40°09'15.513"N	80°36'48.417"W	621.40	256.371	0.80	-0.61	-166.68
4789.00	0.540	92.050	4709.24	-110.32	-146.51	-603.45	1748427.14	14583159.30	40°09'15.512"N	80°36'48.411"W	620.98	256.353	0.56	0.49	-73.02
4879.00	1.020	67.240	4799.23	-110.12	-146.21	-602.29	1748428.30	14583159.60	40°09'15.515"N	80°36'48.396"W	619.78	256.355	0.64	0.63	-27.57
4970.00	1.350	57.420	4890.21	-110.27	-145.32	-600.64	1748429.95	14583160.49	40°09'15.524"N	80°36'48.375"W	617.97	256.399	0.42	0.36	-10.79
5060.00	0.640	17.770	4980.20	-110.80	-144.27	-599.59	1748431.00	14583161.54	40°09'15.534"N	80°36'48.361"W	616.71	256.471	1.06	-0.79	-44.06
5099.00	0.590	328.570	5019.20	-111.17	-143.90	-599.63	1748430.96	14583161.92	40°09'15.538"N	80°36'48.361"W	616.65	256.506	1.32	-0.13	-126.15
5150.00	0.660	310.650	5070.20	-111.69	-143.48	-599.99	1748430.60	14583162.33	40°09'15.542"N	80°36'48.366"W	616.91	256.551	0.41	0.14	-35.14
5190.00	0.610	208.390	5110.19	-111.77	-143.52	-600.27	1748430.33	14583162.29	40°09'15.542"N	80°36'48.370"W	617.18	256.554	2.47	-0.13	-255.65

Actual Wellpath Report

Benjamin Honecker OHI 6H AWP Proj:14534

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REFERENCE WELLPATH IDENTIFICATION

Operator	Slot	Slot 6H
SOUTHWESTERN ENERGY	Well	Benjamin Honecker OHI 6H
Area	Wellbore	Benjamin Honecker OHI 6H AWP
Field		
Facility		

WELLPATH DATA (169 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]
5281.00	6.820	174.540	5200.96	-106.34	-149.33	-599.98	1748430.61	14583156.49	40°09'15.484"N	80°36'48.366"W	618.29	256.024	6.95	6.82	-37.20
5371.00	9.450	173.700	5290.05	-94.23	-161.99	-598.66	1748431.93	14583143.82	40°09'15.359"N	80°36'48.350"W	620.19	254.859	2.93	2.92	-0.93
5462.00	15.860	174.410	5378.79	-75.28	-181.82	-596.63	1748433.96	14583124.01	40°09'15.163"N	80°36'48.325"W	623.72	253.052	7.05	7.04	0.78
5552.00	23.080	173.890	5463.59	-46.76	-211.64	-593.55	1748437.04	14583094.20	40°09'14.868"N	80°36'48.287"W	630.15	250.376	8.02	8.02	-0.58
5642.00	30.490	170.720	5543.88	-7.81	-251.77	-587.98	1748442.61	14583054.09	40°09'14.471"N	80°36'48.218"W	639.62	246.820	8.38	8.23	-3.52
5733.00	38.870	170.070	5618.65	42.33	-302.77	-579.32	1748451.26	14583003.10	40°09'13.967"N	80°36'48.109"W	653.67	242.407	9.22	9.21	-0.71
5823.00	46.940	170.450	5684.52	101.69	-363.11	-568.98	1748461.60	14582942.79	40°09'13.370"N	80°36'47.979"W	674.97	237.455	8.97	8.97	0.42
5914.00	51.150	170.430	5744.15	168.26	-430.86	-557.57	1748473.01	14582875.06	40°09'12.700"N	80°36'47.836"W	704.64	232.305	4.63	4.63	-0.02
6004.00	55.760	168.440	5797.73	238.61	-501.91	-544.28	1748486.29	14582804.04	40°09'11.998"N	80°36'47.669"W	740.37	227.319	5.42	5.12	-2.21
6049.00	59.730	167.030	5821.74	275.88	-539.09	-536.18	1748494.38	14582766.88	40°09'11.630"N	80°36'47.567"W	760.33	224.845	9.21	8.82	-3.13
6094.00	63.250	165.930	5843.22	314.77	-577.53	-526.94	1748503.63	14582728.45	40°09'11.250"N	80°36'47.450"W	781.79	222.377	8.11	7.82	-2.44
6139.00	65.980	164.520	5862.51	354.91	-616.83	-516.56	1748514.00	14582689.17	40°09'10.861"N	80°36'47.318"W	804.56	219.944	6.69	6.07	-3.13
6184.00	69.500	163.390	5879.55	396.16	-656.85	-505.05	1748525.51	14582649.17	40°09'10.465"N	80°36'47.172"W	828.57	217.557	8.16	7.82	-2.51
6229.00	73.560	162.440	5893.81	438.53	-697.63	-492.51	1748538.04	14582608.39	40°09'10.061"N	80°36'47.013"W	853.97	215.221	9.24	9.02	-2.11
6274.00	77.370	161.600	5905.10	481.86	-739.06	-479.06	1748551.48	14582566.99	40°09'09.651"N	80°36'46.842"W	880.74	212.952	8.66	8.47	-1.87
6320.00	81.230	160.470	5913.64	526.88	-781.79	-464.37	1748566.17	14582524.27	40°09'09.228"N	80°36'46.655"W	909.31	210.710	8.73	8.39	-2.46
6365.00	84.610	158.540	5919.18	571.45	-823.62	-448.74	1748581.80	14582482.46	40°09'08.814"N	80°36'46.456"W	937.93	208.583	8.63	7.51	-4.29
6409.00	87.780	157.190	5922.10	615.33	-864.28	-432.20	1748598.33	14582441.82	40°09'08.412"N	80°36'46.246"W	966.32	206.568	7.83	7.20	-3.07
6455.00	89.050	154.780	5923.38	661.30	-906.27	-413.49	1748617.03	14582399.83	40°09'07.996"N	80°36'46.007"W	996.14	204.525	5.92	2.76	-5.24
6545.00	89.050	152.270	5924.87	751.19	-986.82	-373.37	1748657.13	14582319.32	40°09'07.198"N	80°36'45.495"W	1055.09	200.725	2.79	0.00	-2.79
6636.00	88.980	151.160	5926.43	841.91	-1066.94	-330.26	1748700.23	14582239.22	40°09'06.405"N	80°36'44.944"W	1116.88	197.199	1.22	-0.08	-1.22
6726.00	89.080	149.650	5927.96	931.45	-1145.19	-285.82	1748744.65	14582161.02	40°09'05.630"N	80°36'44.376"W	1180.31	194.014	1.68	0.11	-1.68
6816.00	89.080	149.520	5929.40	1020.85	-1222.79	-240.26	1748790.19	14582083.44	40°09'04.861"N	80°36'43.794"W	1246.17	191.116	0.14	0.00	-0.14
6907.00	89.140	149.890	5930.81	1111.27	-1301.35	-194.36	1748836.07	14582004.91	40°09'04.082"N	80°36'43.207"W	1315.79	188.494	0.41	0.07	0.41
6997.00	89.110	149.650	5932.19	1200.71	-1379.10	-149.05	1748881.36	14581927.19	40°09'03.312"N	80°36'42.628"W	1387.14	186.169	0.27	-0.03	-0.27
7088.00	89.110	145.230	5933.60	1290.63	-1455.77	-100.10	1748930.30	14581850.55	40°09'02.552"N	80°36'42.002"W	1459.21	183.933	4.86	0.00	-4.86
7177.00	89.080	141.800	5935.01	1377.46	-1527.31	-47.19	1748983.19	14581779.04	40°09'01.843"N	80°36'41.325"W	1528.04	181.770	3.85	-0.03	-3.85
7268.00	89.080	145.810	5936.47	1466.34	-1600.72	6.53	1749036.89	14581705.65	40°09'01.115"N	80°36'40.637"W	1600.74	179.766	4.41	0.00	4.41
7358.00	89.140	148.760	5937.87	1555.25	-1676.43	55.16	1749085.50	14581629.98	40°09'00.365"N	80°36'40.015"W	1677.34	178.115	3.28	0.07	3.28
7449.00	89.050	151.300	5939.31	1645.72	-1755.25	100.61	1749130.93	14581551.19	40°08'59.584"N	80°36'39.434"W	1758.13	176.719	2.79	-0.10	-2.79

Actual Wellpath Report

Benjamin Honecker OHI 6H AWP Proj:14534

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05/31/2019

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot 6H
Area	Ohio County, WV	Well	Benjamin Honecker OHI 6H
Field	Ohio	Wellbore	Benjamin Honecker OHI 6H AWP
Facility	Benjamin Honecker OHI Pad		

WELLPATH DATA (169 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]
7539.00	89.110	152.800	5940.75	1735.48	-1834.74	142.79	1749173.09	14581471.73	40°08'58.79"N	80°36'38.896"W	1840.28	175.550	1.67	0.07	1.67
7630.00	89.290	154.500	5942.02	1826.38	-1916.27	183.17	1749213.46	14581390.23	40°08'57.990"N	80°36'38.380"W	1925.00	174.540	1.88	0.20	1.87
7720.00	89.170	154.990	5943.23	1916.35	-1997.66	221.57	1749251.84	14581308.87	40°08'57.184"N	80°36'37.890"W	2009.91	173.671	0.56	-0.13	0.54
7811.00	89.690	155.410	5944.14	2007.33	-2080.26	259.73	1749289.99	14581226.30	40°08'56.366"N	80°36'37.403"W	2096.42	172.883	0.73	0.57	0.46
7901.00	88.620	150.980	5945.47	2097.18	-2160.56	300.30	1749330.55	14581146.03	40°08'55.570"N	80°36'36.886"W	2181.33	172.087	5.06	-1.19	-4.92
7991.00	88.710	151.210	5947.56	2186.81	-2239.33	343.79	1749374.02	14581067.30	40°08'54.790"N	80°36'36.330"W	2265.57	171.272	0.27	0.10	0.26
8082.00	88.770	153.610	5949.56	2277.59	-2319.96	385.93	1749416.14	14580986.70	40°08'53.992"N	80°36'35.792"W	2351.84	170.555	2.64	0.07	2.64
8172.00	88.740	148.790	5951.52	2367.21	-2398.78	429.26	1749459.46	14580907.91	40°08'53.211"N	80°36'35.238"W	2436.89	169.854	5.35	-0.03	-5.36
8262.00	88.680	146.740	5953.55	2456.23	-2474.89	477.25	1749507.43	14580831.83	40°08'52.457"N	80°36'34.625"W	2520.48	169.085	2.28	-0.07	-2.28
8353.00	88.710	149.100	5955.62	2546.27	-2551.97	525.57	1749555.72	14580754.78	40°08'51.693"N	80°36'34.007"W	2605.52	168.363	2.59	0.03	2.59
8443.00	88.710	146.270	5957.65	2635.26	-2628.00	573.66	1749603.80	14580678.78	40°08'50.939"N	80°36'33.392"W	2689.88	167.686	3.14	0.00	-3.14
8534.00	88.710	147.770	5959.69	2725.09	-2704.31	623.18	1749653.30	14580602.49	40°08'50.183"N	80°36'32.758"W	2775.19	167.023	1.65	0.00	1.65
8623.00	88.680	148.080	5961.72	2813.16	-2779.71	670.43	1749700.53	14580527.13	40°08'49.436"N	80°36'32.154"W	2859.42	166.440	0.35	-0.03	0.35
8714.00	88.740	148.550	5963.77	2903.29	-2857.13	718.22	1749748.30	14580449.74	40°08'48.669"N	80°36'31.543"W	2946.02	165.889	0.52	0.07	0.52
8804.00	88.490	148.220	5965.95	2992.45	-2933.75	765.38	1749795.45	14580373.15	40°08'47.910"N	80°36'30.940"W	3031.94	165.378	0.46	-0.28	-0.37
8895.00	89.080	148.830	5967.88	3082.63	-3011.34	812.89	1749842.93	14580295.59	40°08'47.141"N	80°36'30.333"W	3119.13	164.894	0.93	0.65	0.67
8985.00	89.110	150.040	5969.30	3172.00	-3088.82	858.65	1749888.67	14580218.13	40°08'46.373"N	80°36'29.748"W	3205.95	164.465	1.34	0.03	1.34
9075.00	89.080	151.750	5970.72	3261.62	-3167.45	902.42	1749932.42	14580139.54	40°08'45.594"N	80°36'29.189"W	3293.49	164.098	1.90	-0.03	1.90
9165.00	89.350	147.030	5971.95	3350.96	-3244.88	948.23	1749978.22	14580062.14	40°08'44.827"N	80°36'28.604"W	3380.58	163.710	5.25	0.30	-5.24
9256.00	89.320	147.340	5973.01	3440.85	-3321.35	997.54	1750027.51	14579985.70	40°08'44.069"N	80°36'27.973"W	3467.92	163.283	0.34	-0.03	0.34
9346.00	89.200	150.590	5974.17	3530.13	-3398.45	1043.93	1750073.88	14579908.63	40°08'43.305"N	80°36'27.380"W	3555.17	162.924	3.61	-0.13	3.61
9437.00	89.350	153.870	5975.32	3620.90	-3478.95	1086.32	1750116.26	14579828.16	40°08'42.508"N	80°36'26.839"W	3644.61	162.659	3.61	0.16	3.60
9527.00	89.380	156.430	5976.32	3710.88	-3560.61	1124.13	1750154.06	14579746.53	40°08'41.699"N	80°36'26.356"W	3733.84	162.478	2.84	0.03	2.84
9617.00	89.540	156.400	5977.17	3800.87	-3643.08	1160.14	1750190.05	14579664.09	40°08'40.883"N	80°36'25.897"W	3823.35	162.336	0.18	0.18	-0.03
9708.00	89.940	156.550	5977.58	3891.87	-3726.52	1196.46	1750226.36	14579580.68	40°08'40.057"N	80°36'25.434"W	3913.88	162.200	0.47	0.44	0.16
9798.00	89.780	157.030	5977.80	3981.86	-3809.23	1231.93	1750261.81	14579498.00	40°08'39.238"N	80°36'24.982"W	4003.49	162.078	0.56	-0.18	0.53
9888.00	89.780	154.000	5978.15	4071.84	-3891.13	1269.23	1750299.10	14579416.14	40°08'38.427"N	80°36'24.507"W	4092.90	161.934	3.37	0.00	-3.37
9979.00	89.970	149.370	5978.35	4162.55	-3971.22	1312.38	1750342.23	14579336.08	40°08'37.633"N	80°36'23.956"W	4182.46	161.713	5.09	0.21	-5.09
10069.00	89.750	152.260	5978.57	4252.15	-4049.79	1356.26	1750386.10	14579257.54	40°08'36.855"N	80°36'23.395"W	4270.86	161.484	3.22	-0.24	3.21
10160.00	89.570	151.680	5979.11	4342.91	-4130.11	1399.03	1750428.84	14579177.25	40°08'36.060"N	80°36'22.849"W	4360.63	161.287	0.67	-0.20	-0.64



Actual Wellpath Report

Benjamin Honecker OHI 6H AWP Proj:14534'
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05/31/2019

REFERENCE WELLPATH IDENTIFICATION		
Operator	SOUTHWESTERN ENERGY	Slot
Area	Ohio County, WV	Well
Field	Ohio	Wellbore
Facility	Benjamin Honecker OHI Pad	
		Slot 6H
		Benjamin Honecker OHI 6H
		Benjamin Honecker OHI 6H AWP

WELLPATH DATA (169 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]
10250.00	89.540	148.950	5979.80	4432.44	-4208.29	1443.59	1750473.39	14579099.10	40°08'35.285"N	80°36'22.280"W	4449.01	161.066	3.03	-0.03	-3.03
10340.00	89.630	147.700	5980.46	4521.60	-4284.88	1490.85	1750520.63	14579022.54	40°08'34.526"N	80°36'21.676"W	4536.83	160.816	1.39	0.10	-1.39
10431.00	89.510	147.070	5981.14	4611.54	-4361.53	1539.89	1750569.66	14578945.92	40°08'33.766"N	80°36'21.048"W	4625.39	160.554	0.70	-0.13	-0.69
10521.00	89.260	150.730	5982.11	4700.81	-4438.57	1586.37	1750616.12	14578868.91	40°08'33.003"N	80°36'20.454"W	4713.55	160.333	4.08	-0.28	4.07
10612.00	89.290	153.870	5983.26	4791.59	-4519.13	1628.66	1750658.39	14578788.38	40°08'32.205"N	80°36'19.914"W	4803.65	160.181	3.45	0.03	3.45
10702.00	89.200	155.840	5984.44	4881.56	-4600.59	1666.90	1750696.61	14578706.95	40°08'31.399"N	80°36'19.427"W	4893.26	160.083	2.19	-0.10	2.19
10793.00	89.080	157.730	5985.81	4972.53	-4684.21	1702.77	1750732.46	14578623.37	40°08'30.571"N	80°36'18.970"W	4984.10	160.023	2.08	-0.13	2.08
10883.00	89.350	151.550	5987.04	5062.45	-4765.49	1741.29	1750770.97	14578542.12	40°08'29.766"N	80°36'18.478"W	5073.65	159.928	6.87	0.30	-6.87
10974.00	89.170	147.080	5988.22	5152.78	-4843.72	1787.71	1750817.38	14578463.92	40°08'28.991"N	80°36'17.885"W	5163.09	159.742	4.92	-0.20	-4.91
11064.00	89.200	147.740	5989.50	5241.73	-4919.54	1836.18	1750865.83	14578388.13	40°08'28.239"N	80°36'17.265"W	5251.04	159.532	0.73	0.03	0.73
11154.00	89.140	148.600	5990.80	5330.86	-4996.00	1883.65	1750913.27	14578311.70	40°08'27.482"N	80°36'16.659"W	5339.30	159.342	0.96	-0.07	0.96
11245.00	89.170	144.000	5992.15	5420.49	-5071.68	1934.12	1750963.73	14578236.05	40°08'26.732"N	80°36'16.013"W	5427.96	159.125	5.05	0.03	-5.05
11336.00	89.260	145.830	5993.39	5509.74	-5146.13	1986.42	1751016.00	14578161.62	40°08'25.993"N	80°36'15.344"W	5516.21	158.893	2.01	0.10	2.01
11426.00	89.200	150.860	5994.60	5598.88	-5222.71	2033.63	1751063.20	14578085.07	40°08'25.235"N	80°36'14.740"W	5604.67	158.725	5.59	-0.07	5.59
11516.00	89.200	152.170	5995.86	5688.58	-5301.81	2076.55	1751106.10	14578006.01	40°08'24.451"N	80°36'14.192"W	5693.96	158.611	1.46	0.00	1.46
11607.00	89.140	151.730	5997.18	5779.33	-5382.11	2119.33	1751148.87	14577925.74	40°08'23.656"N	80°36'13.646"W	5784.35	158.507	0.49	-0.07	-0.48
11697.00	89.200	152.320	5998.48	5869.09	-5461.58	2161.55	1751191.07	14577846.29	40°08'22.868"N	80°36'13.107"W	5873.77	158.408	0.66	0.07	0.66
11787.00	88.800	150.800	6000.05	5958.79	-5540.71	2204.40	1751233.90	14577767.20	40°08'22.085"N	80°36'12.560"W	5963.12	158.305	1.75	-0.44	-1.69
11878.00	88.890	152.020	6001.89	6049.46	-5620.59	2247.94	1751277.43	14577687.35	40°08'21.293"N	80°36'12.004"W	6053.45	158.201	1.34	0.10	1.34
11968.00	88.800	153.570	6003.70	6139.29	-5700.62	2289.08	1751318.55	14577607.35	40°08'20.501"N	80°36'11.479"W	6143.04	158.122	1.72	-0.10	1.72
12058.00	88.770	152.130	6005.61	6229.12	-5780.68	2330.13	1751359.59	14577527.32	40°08'19.708"N	80°36'10.955"W	6232.64	158.046	1.60	-0.03	-1.60
12148.00	88.830	152.040	6007.49	6318.88	-5860.19	2372.26	1751401.70	14577447.84	40°08'18.920"N	80°36'10.417"W	6322.14	157.961	0.12	0.07	-0.10
12239.00	88.830	152.910	6009.35	6409.67	-5940.87	2414.30	1751443.73	14577367.19	40°08'18.121"N	80°36'09.880"W	6412.71	157.884	0.96	0.00	0.96
12329.00	88.800	152.750	6011.21	6499.50	-6020.93	2455.39	1751484.80	14577287.17	40°08'17.328"N	80°36'09.356"W	6502.35	157.814	0.18	-0.03	-0.18
12420.00	88.800	149.620	6013.12	6590.14	-6100.63	2499.24	1751528.63	14577207.49	40°08'16.538"N	80°36'08.796"W	6592.71	157.723	3.44	0.00	-3.44
12510.00	88.830	152.380	6014.98	6679.75	-6179.32	2542.86	1751572.23	14577128.83	40°08'15.759"N	80°36'08.239"W	6682.08	157.632	3.07	0.03	3.07
12601.00	89.290	153.620	6016.48	6770.60	-6260.39	2584.16	1751613.52	14577047.80	40°08'14.956"N	80°36'07.712"W	6772.77	157.570	1.45	0.51	1.36
12692.00	89.140	151.990	6017.72	6861.44	-6341.32	2625.75	1751655.09	14576966.90	40°08'14.154"N	80°36'07.181"W	6863.45	157.507	1.81	-0.16	-1.80
12782.00	89.200	150.170	6019.03	6951.07	-6420.08	2669.28	1751698.60	14576888.17	40°08'13.374"N	80°36'06.625"W	6952.87	157.424	2.01	0.07	-2.01
12872.00	89.140	151.550	6020.33	7040.68	-6498.68	2713.10	1751742.40	14576809.60	40°08'12.596"N	80°36'06.065"W	7042.28	157.340	1.53	-0.07	1.53

REFERENCE WELLPATH IDENTIFICATION	
Operator	SOUTHWESTERN ENERGY
Area	Ohio County, WV
Field	Ohio
Facility	Benjamin Honecker OHI Pad
Slot	Slot 6H
Well	Benjamin Honecker OHI 6H
Wellbore	Benjamin Honecker OHI 6H AWP

WELLPATH DATA (169 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]
12962.00	89.110	150.780	6021.70	7130.34	-6577.51	2756.50	1751785.79	14576730.80	40°08'11.815"N	80°36'05.511"W	7131.75	157.262	0.86	-0.03	-0.86
13053.00	89.110	150.500	6023.12	7220.91	-6656.81	2801.11	1751830.38	14576651.53	40°08'11.029"N	80°36'04.941"W	7222.14	157.179	0.31	0.00	-0.31
13143.00	89.200	148.140	6024.45	7310.26	-6734.20	2847.02	1751876.28	14576574.17	40°08'10.262"N	80°36'04.354"W	7311.29	157.083	2.62	0.10	-2.62
13234.00	89.230	147.870	6025.69	7400.34	-6811.37	2895.23	1751924.47	14576497.03	40°08'09.497"N	80°36'03.738"W	7401.16	156.972	0.30	0.03	-0.30
13324.00	89.350	149.950	6026.81	7489.62	-6888.43	2941.70	1751970.92	14576420.00	40°08'08.734"N	80°36'03.144"W	7490.27	156.875	2.31	0.13	2.31
13415.00	88.830	150.470	6028.25	7580.12	-6967.40	2986.91	1752016.11	14576341.07	40°08'07.952"N	80°36'02.567"W	7580.65	156.795	0.81	-0.57	0.57
13505.00	88.800	150.990	6030.11	7669.70	-7045.89	3030.90	1752060.08	14576262.61	40°08'07.174"N	80°36'02.005"W	7670.13	156.724	0.58	-0.03	0.58
13595.00	88.710	151.570	6032.07	7759.36	-7124.80	3074.14	1752103.30	14576183.73	40°08'06.392"N	80°36'01.453"W	7759.71	156.661	0.65	-0.10	0.64
13686.00	88.800	152.110	6034.05	7850.08	-7205.01	3117.07	1752146.22	14576103.55	40°08'05.598"N	80°36'00.905"W	7850.37	156.605	0.60	0.10	0.59
13776.00	89.050	152.160	6035.73	7939.85	-7284.56	3159.13	1752188.26	14576024.03	40°08'04.810"N	80°36'00.368"W	7940.08	156.555	0.28	0.28	0.06
13867.00	88.800	153.990	6037.44	8030.70	-7365.67	3200.33	1752229.45	14575942.94	40°08'04.006"N	80°35'59.842"W	8030.89	156.515	2.03	-0.27	2.01
13958.00	89.020	154.870	6039.17	8121.65	-7447.75	3239.60	1752268.70	14575860.90	40°08'03.193"N	80°35'59.341"W	8121.82	156.492	1.00	0.24	0.97
14048.00	88.770	151.700	6040.91	8211.51	-7528.11	3280.05	1752309.13	14575780.57	40°08'02.397"N	80°35'58.825"W	8211.65	156.457	3.53	-0.28	-3.52
14138.00	88.860	149.800	6042.77	8301.09	-7606.62	3324.01	1752353.08	14575702.09	40°08'01.620"N	80°35'58.264"W	8301.19	156.395	2.11	0.10	-2.11
14229.00	88.890	149.690	6044.56	8391.51	-7685.21	3369.85	1752398.90	14575623.53	40°08'00.841"N	80°35'57.678"W	8391.56	156.323	0.13	0.03	-0.12
14320.00	88.740	147.330	6046.44	8481.68	-7762.78	3417.37	1752446.40	14575545.99	40°08'00.072"N	80°35'57.071"W	8481.70	156.240	2.60	-0.16	-2.59
14410.00	88.830	146.750	6048.35	8570.53	-7838.28	3466.33	1752495.34	14575470.52	40°07'59.324"N	80°35'56.445"W	8570.53	156.144	0.65	0.10	-0.64
14500.00	88.890	149.260	6050.14	8659.61	-7914.59	3514.00	1752542.99	14575394.24	40°07'58.568"N	80°35'55.836"W	8659.61	156.059	2.79	0.07	2.79
14534.00	88.890	149.260	6050.80	8693.36	-7943.81	3531.37	1752560.36	14575365.04	40°07'58.278"N	80°35'55.614"W	8693.37	156.033	0.00	0.00	0.00

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY	Slot	Slot 6H
Area	Ohio County, WV	Well	Benjamin Honecker OHI 6H
Field	Ohio	Wellbore	Benjamin Honecker OHI 6H AWP
Facility	Benjamin Honecker OHI Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Benjamin Honecker OHI 6H AWP Ref Wellpath: Benjamin Honecker OHI 6H AWP Proj:14534'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
20in Conductor	26.00	126.00	100.00	26.00	126.00	0.00	0.00	-0.30	-0.02
17.5in Open Hole	126.00	390.00	264.00	126.00	390.00	-0.30	-0.02	-1.69	0.24
13.375in Casing Surface	26.00	390.00	364.00	26.00	390.00	0.00	0.00	-1.69	0.24
12.25in Open Hole	390.00	1718.00	1328.00	390.00	1711.89	-1.69	0.24	-82.61	-79.49
9.625in Casing Intermediate	26.00	1718.00	1692.00	26.00	1711.89	0.00	0.00	-82.61	-79.49
8.75in Open Hole	1718.00	5175.00	3457.00	1711.89	5095.19	-82.61	-79.49	-143.42	-600.18
8.5in Open Hole	5175.00	14534.00	9359.00	5095.19	6050.80	-143.42	-600.18	-7943.81	3531.37
5.5in Casing Production	26.00	14534.00	14508.00	26.00	6050.80	0.00	0.00	-7943.81	3531.37

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Benjamin Honecker OHI 6H LP Rev-3	5923.00	-844.43	-407.49	1748623.03	14582461.65	40°09'08.607"N	80°36'45.926"W	point
Benjamin Honecker OHI 6H BHL Rev-3	6063.00	-7951.02	3519.44	1752548.44	14575357.82	40°07'58.208"N	80°35'55.768"W	point

WELLPATH COMPOSITION - Ref Wellbore: Benjamin Honecker OHI 6H AWP Ref Wellpath: Benjamin Honecker OHI 6H AWP Proj:14534'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment
26.00	5099.00	OWSG MWD rev2 + HRGM	01 Premier MWD <8-3/4"> (149'-5099')
5099.00	14500.00	BHI AutoTrak Curve (Short)	02 BH AT Curve <8-1/2"> (5099')(5150'-14500')
14500.00	14534.00	Blind Drilling (std)	Projection to bit

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Operator	SOUTHWESTERN ENERGY	Slot	Slot 6H
Area	Ohio County, WV	Well	Benjamin Honecker OHI 6H
Field	Ohio	Wellbore	Benjamin Honecker OHI 6H AWP
Facility	Benjamin Honecker OHI Pad		

COMMENTS

Wellpath general comments
API: 47-069-00243-0000
BH Job #: 109466020
Rig: SDC 42
Duration: 10/29/2018 - 11/01/2018

05/31/2019

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