

# SOUTHWESTERN ENERGY

Location: Marshall County, WV  
 Field: Marshall  
 Slot: Slot 9H  
 Well: Columbia Gas Transmission MSH 9H  
 Wellbore: Columbia Gas Transmission MSH 9H-PWP

Facility: Columbia Gas Transmission MSH Pad

Grid System: NAD83 UTM Zone 17 North, US feet

\* = Height was transformed from a different geoid/catum

North Reference: Grid north

Scale: True distance

Depths are in feet

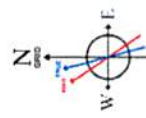
Created by: Inhouse on 2018-02-28

Database: WA\_Pennsylvania

2 1/2" x 20ft Conductor: 0.42" Inc, 125.00ft MD, 125.00ft TVD, 0.30ft VS  
 APS EM <17.5>(207-316) : 0.77" Inc, 207.00ft MD, 206.99ft TVD, 1.00ft VS  
 L13.375in Casing Surface : 0.47" Inc, 343.00ft MD, 342.98ft TVD, 2.40ft VS  
 APS EM <12.25>(364-1989) : 0.30" Inc, 364.00ft MD, 363.98ft TVD, 2.51ft VS

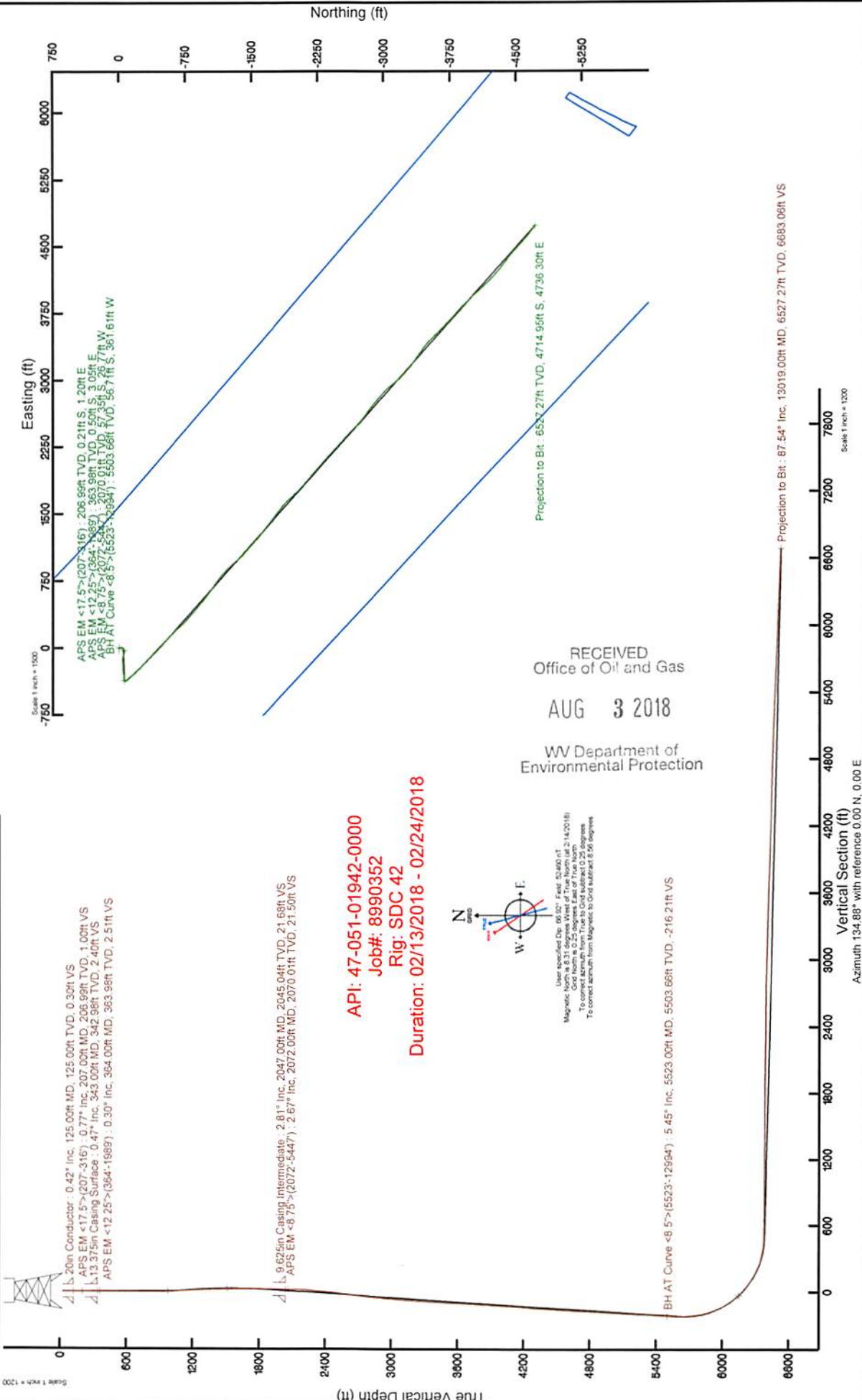
9.625in Casing Intermediate : 2.81" Inc, 2047.00ft MD, 2045.04ft TVD, 21.68ft VS  
 APS EM <8.75>(2072-5447) : 2.67" Inc, 2072.00ft MD, 2070.01ft TVD, 21.50ft VS

**API: 47-051-01942-0000**  
**Job#: 8990352**  
**Rig: SDC 42**  
**Duration: 02/13/2018 - 02/24/2018**



User specified Dip: 68.00° Field: 50460 nT  
 Magnetic North is 8.31 degrees West of True North (at 2/14/2018)  
 Grid North is 0.25 degrees East of True North  
 To correct azimuth from Magnetic to Grid add/subtract 8.06 degrees

BH AT Curve <8.5>(5523-12594) : 5.45" Inc, 5523.00ft MD, 5503.66ft TVD, -2.16 21ft VS



Scale 1 inch = 1500  
 Scale 1 inch = 1200

APS EM <17.5>(207-316) : 206.99ft TVD, 0.21ft S, 1.20ft E  
 APS EM <12.25>(364-1989) : 363.98ft TVD, 0.15ft S, 2.05ft E  
 APS EM <8.75>(2072-5447) : 2070.01ft TVD, 57.35ft S, 26.77ft W  
 BH AT Curve <8.5>(5523-12594) : 5503.66ft TVD, 56.7ft S, 361.61ft W

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Projection to Bit : 87.54° Inc, 13019.00ft MD, 6527.27ft TVD, 6683.06ft VS

Vertical Section (ft)  
 Azimuth 134.88° with reference 0.00 N, 0.00 E

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Columbia Gas Transmission MSH Pad	1748565.880	14437578.433	80°36'54.713"W
Slot	Local E (ft)	Local N (ft)	Longitude
Slot 9H	-5.73	63.02	80°36'53.906"W
SDC 42 (KB) to Mud line (At Slot: Slot 9H)			
Mean Sea Level to Mud line (At Slot: Slot 9H)	-783.6ft		
SDC 42 (KB) to Mean Sea Level			
	809.8ft		



REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Thomsuzc
Scale	0.999613	Report Generated	2/28/2018 at 10:19:17 AM
Convergence at slot	0.25° East	Database/Source file	WA_Pennsylvania/Columbia_Gas_Transmission_MSH_9H_AWP_Proj_13019_MD.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-5.73	63.02	1748628.88	14437572.71	39°45'16.213"N	80°36'53.906"W
Facility Reference Pt			1748565.88	14437578.43	39°45'16.272"N	80°36'54.713"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 (KB) to Facility Vertical Datum	809.80ft
Horizontal Reference Pt	Slot	SDC 42 (KB) to Mean Sea Level	809.80ft
Vertical Reference Pt	SDC 42 (KB)	SDC 42 (KB) to Mud Line at Slot (Slot 9H)	26.00ft
MD Reference Pt	SDC 42 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	134.88°

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Area	Marshall County, WV
Field	Marshall
Facility	Columbia Gas Transmission MSH Pad
Slot	Slot 9H
Well	Columbia Gas Transmission MSH 9H AWB
Wellbore	Columbia Gas Transmission MSH 9H AWB

## WELLPATH DATA (175 stations) † = interpolated/extrapolated station

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]	[°N]	[°W]	[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
0.00	0.00	100.160	0.00	0.00	0.00	0.00	1748628.88	14437572.71	39°45'16.213"N	80°36'53.906"W	0.00	0.00	0.00	0.00	0.00
26.00	0.00	100.160	26.00	0.00	0.00	0.00	1748628.88	14437572.71	39°45'16.213"N	80°36'53.906"W	0.00	0.00	0.00	0.00	0.00
207.00	0.770	100.160	206.99	1.00	-0.21	1.20	1748630.08	14437572.50	39°45'16.211"N	80°36'53.891"W	1.22	100.160	0.43	0.43	55.34
300.00	0.780	96.710	299.99	2.01	-0.40	2.44	1748631.32	14437572.31	39°45'16.209"N	80°36'53.875"W	2.47	99.278	0.05	0.01	-3.71
316.00	0.690	99.310	315.98	2.17	-0.43	2.64	1748631.52	14437572.28	39°45'16.208"N	80°36'53.872"W	2.68	99.174	0.60	-0.56	16.25
364.00	0.300	100.980	363.98	2.87	-0.50	3.05	1748631.93	14437572.21	39°45'16.208"N	80°36'53.867"W	3.09	99.260	0.81	-0.81	3.48
423.00	0.600	92.220	422.98	2.87	-0.54	3.51	1748632.39	14437572.17	39°45'16.207"N	80°36'53.861"W	3.55	98.725	0.52	0.51	-14.85
520.00	0.720	177.510	519.98	3.69	-1.17	4.05	1748632.93	14437571.54	39°45'16.201"N	80°36'53.854"W	4.21	106.094	0.93	0.12	87.93
609.00	1.220	185.290	608.96	4.71	-2.67	3.98	1748632.86	14437570.04	39°45'16.186"N	80°36'53.855"W	4.80	123.827	0.58	0.56	8.74
693.00	1.120	195.190	692.95	5.68	-4.35	3.69	1748632.56	14437568.36	39°45'16.170"N	80°36'53.859"W	5.70	139.736	0.27	-0.12	11.79
774.00	0.580	167.630	773.94	6.42	-5.52	3.57	1748632.45	14437567.20	39°45'16.158"N	80°36'53.861"W	6.57	147.116	0.82	-0.67	-34.02
857.00	0.510	53.650	856.94	6.83	-5.71	3.95	1748632.83	14437567.00	39°45'16.156"N	80°36'53.856"W	6.94	145.288	1.10	-0.08	-137.33
940.00	0.450	214.640	939.93	6.94	-5.76	4.07	1748632.95	14437566.95	39°45'16.156"N	80°36'53.854"W	7.05	144.766	1.14	-0.07	193.96
1021.00	1.810	198.370	1020.92	7.57	-7.23	3.48	1748632.36	14437565.48	39°45'16.141"N	80°36'53.862"W	8.03	154.291	1.71	1.66	-20.09
1105.00	2.980	183.240	1104.84	9.61	-10.67	2.94	1748631.82	14437562.04	39°45'16.107"N	80°36'53.869"W	11.07	164.593	1.57	1.39	-18.01
1185.00	3.660	174.920	1184.71	12.95	-15.29	3.05	1748631.93	14437557.42	39°45'16.061"N	80°36'53.868"W	15.59	168.722	1.04	0.85	-10.40
1270.00	3.590	186.230	1269.54	16.69	-20.64	3.00	1748631.88	14437552.08	39°45'16.009"N	80°36'53.869"W	20.86	171.727	0.84	-0.08	13.31
1354.00	3.500	201.630	1353.38	19.35	-25.64	1.77	1748630.65	14437547.08	39°45'15.959"N	80°36'53.885"W	25.70	176.049	1.14	-0.11	18.33
1435.00	2.860	197.330	1434.26	21.26	-29.87	0.26	1748629.14	14437542.86	39°45'15.918"N	80°36'53.905"W	29.87	179.507	0.84	-0.79	-5.31
1519.00	2.970	202.040	1518.15	23.07	-33.88	-1.18	1748627.70	14437538.84	39°45'15.878"N	80°36'53.923"W	33.90	182.001	0.31	0.13	5.61
1601.00	3.760	217.400	1600.01	24.24	-37.99	-3.61	1748625.27	14437534.74	39°45'15.837"N	80°36'53.955"W	38.16	185.434	1.45	0.96	18.73
1685.00	4.290	226.110	1683.80	24.54	-42.35	-7.55	1748621.33	14437530.37	39°45'15.794"N	80°36'54.005"W	43.02	190.109	0.96	0.63	10.37
1770.00	4.220	228.870	1768.57	24.25	-46.62	-12.20	1748616.69	14437526.11	39°45'15.753"N	80°36'54.065"W	48.19	194.664	0.25	-0.08	3.25
1854.00	3.950	232.700	1852.35	23.64	-50.40	-16.83	1748612.06	14437522.33	39°45'15.715"N	80°36'54.124"W	53.14	198.462	0.46	-0.32	4.56
1938.00	3.090	236.190	1936.19	22.80	-53.41	-21.01	1748607.88	14437519.32	39°45'15.686"N	80°36'54.178"W	57.40	201.471	1.05	-1.02	4.15
1989.00	3.140	236.720	1987.12	22.25	-54.95	-23.32	1748605.57	14437517.79	39°45'15.671"N	80°36'54.208"W	59.69	202.997	0.11	0.10	1.04
2072.00	2.670	233.360	2070.01	21.50	-57.35	-26.77	1748602.12	14437515.39	39°45'15.647"N	80°36'54.252"W	63.29	205.027	0.60	-0.57	-4.05
2114.00	2.560	231.740	2111.97	21.24	-58.51	-28.29	1748600.60	14437514.22	39°45'15.636"N	80°36'54.272"W	64.99	205.806	0.32	-0.26	-3.86
2197.00	4.430	283.990	2194.83	18.27	-58.88	-32.86	1748596.03	14437513.85	39°45'15.632"N	80°36'54.330"W	67.43	209.163	4.22	2.25	62.95
2278.00	5.620	289.080	2275.52	12.01	-56.83	-39.64	1748589.25	14437515.80	39°45'15.653"N	80°36'54.417"W	69.29	214.898	1.57	1.47	6.28

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# Actual Wellpath Report

Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

### WELLPATH DATA (175 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]
2361.00	7.060	284.810	2358.01	3.94	-54.20	-48.42	1748580.48	14437518.53	39°45'15.679"N	80°36'54.529"W	72.68	221.775	1.82	1.73	-5.14
2445.00	7.640	279.960	2441.32	-5.11	-51.91	-58.91	1748570.00	14437520.82	39°45'15.702"N	80°36'54.663"W	78.52	228.611	1.01	0.69	-5.77
2528.00	7.670	283.930	2523.58	-14.38	-49.63	-69.72	1748559.19	14437523.10	39°45'15.725"N	80°36'54.802"W	85.58	234.556	0.64	0.04	4.78
2611.00	7.800	283.110	2605.82	-23.92	-47.02	-80.58	1748548.33	14437525.71	39°45'15.752"N	80°36'54.940"W	93.29	239.738	0.21	0.16	-0.99
2695.00	7.330	282.900	2689.09	-33.31	-44.53	-91.35	1748537.56	14437528.20	39°45'15.777"N	80°36'55.078"W	101.63	244.015	0.56	-0.56	-0.25
2778.00	7.180	281.260	2771.43	-42.12	-42.33	-101.60	1748527.32	14437530.39	39°45'15.799"N	80°36'55.209"W	110.07	247.381	0.31	-0.18	-1.98
2861.00	6.830	282.280	2853.81	-50.60	-40.27	-111.51	1748517.41	14437532.46	39°45'15.820"N	80°36'55.336"W	118.56	250.144	0.45	-0.42	1.23
2943.00	6.740	273.700	2935.23	-58.33	-38.92	-121.08	1748507.85	14437533.80	39°45'15.833"N	80°36'55.459"W	127.18	252.180	1.24	-0.11	-10.46
3025.00	6.800	271.980	3016.66	-65.51	-38.44	-130.73	1748498.20	14437534.28	39°45'15.838"N	80°36'55.582"W	136.27	253.613	0.26	0.07	-2.10
3107.00	5.960	267.480	3098.15	-71.95	-38.46	-139.84	1748489.10	14437534.26	39°45'15.839"N	80°36'55.699"W	145.03	254.621	1.19	-1.02	-5.49
3192.00	5.620	266.140	3182.72	-77.68	-38.94	-148.40	1748480.54	14437533.79	39°45'15.834"N	80°36'55.808"W	153.42	255.298	0.43	-0.40	-1.58
3277.00	5.310	267.200	3267.33	-83.07	-39.41	-156.48	1748472.46	14437533.32	39°45'15.830"N	80°36'55.912"W	161.37	255.864	0.38	-0.36	1.25
3361.00	5.030	265.610	3350.99	-88.09	-39.88	-164.03	1748464.91	14437532.84	39°45'15.826"N	80°36'56.009"W	168.81	256.335	0.37	-0.33	-1.89
3446.00	5.050	265.330	3435.66	-92.95	-40.47	-171.48	1748457.47	14437532.26	39°45'15.820"N	80°36'56.104"W	176.19	256.720	0.04	0.02	-0.33
3530.00	4.640	263.040	3519.36	-97.45	-41.18	-178.53	1748450.42	14437531.54	39°45'15.813"N	80°36'56.194"W	183.22	257.010	0.54	-0.49	-2.73
3615.00	5.110	261.180	3604.06	-101.81	-42.18	-185.69	1748443.26	14437530.55	39°45'15.804"N	80°36'56.286"W	190.42	257.202	0.58	0.55	-2.19
3697.00	5.120	269.240	3685.73	-106.53	-42.79	-192.95	1748436.00	14437529.94	39°45'15.798"N	80°36'56.379"W	197.64	257.497	0.88	0.01	9.83
3780.00	4.930	273.270	3768.41	-111.79	-42.63	-200.22	1748428.74	14437530.09	39°45'15.800"N	80°36'56.472"W	204.71	257.979	0.48	-0.23	4.86
3863.00	4.240	269.740	3851.15	-116.62	-42.45	-206.85	1748422.11	14437530.28	39°45'15.802"N	80°36'56.557"W	211.16	258.404	0.90	-0.83	-4.25
3946.00	4.850	268.900	3933.88	-121.22	-42.53	-213.42	1748415.54	14437530.20	39°45'15.802"N	80°36'56.641"W	217.62	258.731	0.74	0.73	-1.01
4029.00	5.280	264.580	4016.56	-126.10	-42.95	-220.73	1748408.23	14437529.77	39°45'15.798"N	80°36'56.735"W	224.87	258.988	0.69	0.52	-5.20
4113.00	5.740	270.940	4100.17	-131.59	-43.25	-228.78	1748400.19	14437529.48	39°45'15.795"N	80°36'56.838"W	232.83	259.295	0.91	0.55	7.57
4194.00	6.160	271.330	4180.74	-137.66	-43.08	-237.18	1748391.80	14437529.64	39°45'15.797"N	80°36'56.945"W	241.06	259.704	0.52	0.52	0.48
4278.00	7.030	267.210	4264.18	-144.39	-43.23	-246.82	1748382.16	14437529.50	39°45'15.796"N	80°36'57.069"W	250.57	260.066	1.18	1.04	-4.90
4360.00	6.940	262.360	4345.57	-150.78	-44.13	-256.74	1748372.24	14437528.60	39°45'15.787"N	80°36'57.196"W	260.50	260.247	0.73	-0.11	-5.91
4444.00	6.530	262.240	4428.99	-156.77	-45.45	-266.50	1748362.48	14437527.28	39°45'15.775"N	80°36'57.321"W	270.35	260.321	0.49	-0.49	-0.14
4527.00	5.980	258.960	4511.50	-162.05	-46.92	-275.42	1748353.57	14437525.81	39°45'15.761"N	80°36'57.435"W	279.39	260.333	0.79	-0.66	-3.95
4609.00	5.690	255.920	4593.07	-166.54	-48.72	-283.56	1748345.43	14437524.01	39°45'15.743"N	80°36'57.539"W	287.71	260.250	0.52	-0.35	-3.71
4691.00	4.960	258.670	4674.72	-170.61	-50.41	-290.98	1748338.02	14437522.32	39°45'15.727"N	80°36'57.635"W	295.31	260.172	0.94	-0.89	3.35
4776.00	4.340	257.970	4759.44	-174.41	-51.80	-297.72	1748331.27	14437520.93	39°45'15.713"N	80°36'57.721"W	302.20	260.130	0.73	-0.73	-0.82

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# Actual Wellpath Report

Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

WELLPATH DATA (175 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]
4860.00	4.560	267.480	4843.19	-178.41	-52.61	-304.17	1748324.83	14437520.12	39°45'15.706"N	80°36'57.804"W	308.68	260.187	0.92	0.26	11.32
4944.00	4.720	272.130	4926.91	-183.20	-52.63	-310.96	1748318.04	14437520.10	39°45'15.706"N	80°36'57.890"W	315.38	260.394	0.49	0.19	5.54
5029.00	4.640	274.430	5011.63	-188.39	-52.23	-317.88	1748311.12	14437520.50	39°45'15.710"N	80°36'57.979"W	322.14	260.669	0.24	-0.09	2.71
5113.00	4.700	267.670	5095.35	-193.31	-52.11	-324.71	1748304.30	14437520.62	39°45'15.712"N	80°36'58.066"W	328.86	260.883	0.66	0.07	-8.05
5196.00	5.230	263.780	5178.04	-198.00	-52.66	-331.87	1748297.14	14437520.07	39°45'15.706"N	80°36'58.158"W	336.02	260.984	0.76	0.64	-4.69
5280.00	5.290	261.620	5261.69	-202.72	-53.64	-339.50	1748289.51	14437519.09	39°45'15.697"N	80°36'58.256"W	343.71	261.022	0.25	0.07	-2.57
5364.00	5.130	261.280	5345.34	-207.26	-54.77	-347.04	1748281.97	14437517.96	39°45'15.686"N	80°36'58.353"W	351.34	261.031	0.19	-0.19	-0.40
5447.00	5.320	262.810	5427.99	-211.83	-55.82	-354.53	1748274.49	14437516.92	39°45'15.676"N	80°36'58.449"W	358.90	261.053	0.28	0.23	1.84
5523.00	5.450	262.760	5503.66	-216.21	-56.71	-361.61	1748267.41	14437516.02	39°45'15.668"N	80°36'58.539"W	366.03	261.087	0.17	0.17	-0.07
5615.00	4.500	255.000	5595.31	-220.71	-58.20	-369.43	1748259.60	14437514.54	39°45'15.653"N	80°36'58.639"W	373.98	261.048	1.26	-1.03	-8.43
5640.00	3.570	216.720	5620.25	-221.09	-59.07	-370.84	1748258.18	14437513.66	39°45'15.645"N	80°36'58.658"W	375.52	260.949	11.14	-3.72	-153.12
5697.00	3.580	178.860	5677.15	-219.56	-62.28	-371.87	1748257.16	14437510.46	39°45'15.613"N	80°36'58.671"W	377.04	260.493	4.07	0.02	-66.42
5737.00	7.100	171.890	5716.97	-216.68	-65.97	-371.49	1748257.53	14437506.76	39°45'15.577"N	80°36'58.666"W	377.30	259.930	8.93	8.80	-17.43
5777.00	8.000	162.450	5756.63	-212.24	-71.08	-370.30	1748258.72	14437501.66	39°45'15.526"N	80°36'58.651"W	377.06	259.135	3.82	2.25	-23.60
5817.00	11.150	152.840	5796.07	-206.09	-77.17	-367.70	1748261.32	14437495.57	39°45'15.466"N	80°36'58.618"W	375.71	258.147	8.80	7.87	-24.03
5859.00	14.210	144.130	5837.04	-197.14	-84.97	-362.82	1748266.20	14437487.78	39°45'15.388"N	80°36'58.556"W	372.64	256.820	8.57	7.29	-20.74
5900.00	16.400	140.240	5876.58	-186.41	-93.49	-356.17	1748272.85	14437479.25	39°45'15.304"N	80°36'58.472"W	368.24	255.292	5.90	5.34	-9.49
5941.00	19.020	139.310	5915.64	-173.98	-103.01	-348.11	1748280.90	14437469.74	39°45'15.209"N	80°36'58.369"W	363.03	253.516	6.43	6.39	-2.27
5983.00	23.690	139.280	5954.74	-158.74	-114.60	-338.14	1748290.87	14437458.15	39°45'15.095"N	80°36'58.242"W	357.03	251.278	11.12	11.12	-0.07
6025.00	27.630	139.160	5992.59	-140.60	-128.37	-326.26	1748302.74	14437444.39	39°45'14.958"N	80°36'58.091"W	350.61	248.523	9.38	9.38	-0.29
6068.00	30.360	138.320	6030.20	-119.81	-144.03	-312.51	1748316.49	14437428.73	39°45'14.803"N	80°36'57.915"W	344.11	245.256	6.42	6.35	-1.95
6110.00	33.750	137.410	6065.79	-97.55	-160.55	-297.55	1748331.44	14437412.22	39°45'14.639"N	80°36'57.725"W	338.11	241.650	8.15	8.07	-2.17
6152.00	37.790	136.340	6099.86	-73.02	-178.46	-280.77	1748348.22	14437394.32	39°45'14.461"N	80°36'57.511"W	332.68	237.559	9.73	9.62	-2.55
6194.00	40.870	134.640	6132.35	-46.41	-197.43	-262.10	1748366.88	14437375.36	39°45'14.273"N	80°36'57.273"W	328.14	233.011	7.77	7.33	-4.05
6235.00	44.810	134.940	6162.41	-18.54	-217.07	-242.32	1748386.65	14437355.73	39°45'14.078"N	80°36'57.021"W	325.33	228.147	9.62	9.61	0.73
6276.00	47.180	133.840	6190.89	10.95	-237.69	-221.25	1748407.72	14437335.11	39°45'13.873"N	80°36'56.752"W	324.73	222.948	6.09	5.78	-2.68
6316.00	50.460	133.950	6217.22	41.05	-258.56	-199.56	1748429.40	14437314.25	39°45'13.666"N	80°36'56.475"W	326.62	217.661	8.20	8.20	0.27
6357.00	53.840	133.280	6242.37	73.41	-280.89	-176.12	1748452.83	14437291.93	39°45'13.444"N	80°36'56.177"W	331.54	212.088	8.34	8.24	-1.63
6398.00	57.130	132.780	6265.60	107.17	-303.94	-151.42	1748477.51	14437268.89	39°45'13.215"N	80°36'55.862"W	339.57	206.483	8.09	8.02	-1.22
6440.00	60.290	132.520	6287.41	143.03	-328.25	-125.03	1748503.90	14437244.59	39°45'12.974"N	80°36'55.525"W	351.25	200.852	7.54	7.52	-0.62

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# Actual Wellpath Report

Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

WELLPATH DATA (175 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]
6482.00	63.750	132.760	6307.12	180.08	-353.37	-97.75	1748531.17	14437219.48	39°45'12.725"N	80°36'55.177"W	366.64	195.462	8.25	8.24	0.57
6525.00	67.540	132.550	6324.85	219.22	-379.91	-68.94	1748559.96	14437192.95	39°45'12.461"N	80°36'54.810"W	386.11	190.286	8.83	8.81	-0.49
6567.00	70.980	132.870	6339.72	258.46	-406.55	-40.09	1748588.81	14437166.32	39°45'12.197"N	80°36'54.442"W	408.52	185.631	8.22	8.19	0.76
6609.00	74.810	133.530	6352.07	298.58	-434.02	-10.83	1748618.05	14437138.86	39°45'11.924"N	80°36'54.069"W	434.16	181.430	9.24	9.12	1.57
6650.00	78.290	133.530	6361.60	338.44	-461.48	18.07	1748646.95	14437111.41	39°45'11.651"N	80°36'53.700"W	461.84	177.757	8.49	8.49	0.00
6691.00	81.160	133.590	6368.92	378.77	-489.28	47.30	1748676.17	14437083.62	39°45'11.375"N	80°36'53.327"W	491.56	174.478	7.00	7.00	0.15
6733.00	84.330	133.810	6374.22	420.42	-518.06	77.42	1748706.27	14437054.85	39°45'11.090"N	80°36'52.943"W	523.81	171.500	7.57	7.55	0.52
6774.00	86.740	133.130	6377.41	461.28	-546.18	107.09	1748735.92	14437026.74	39°45'10.810"N	80°36'52.565"W	556.58	168.907	6.11	5.88	-1.66
6816.00	89.940	134.040	6378.63	503.24	-575.12	137.49	1748766.32	14436997.81	39°45'10.523"N	80°36'52.177"W	591.33	166.555	7.92	7.62	2.17
6858.00	89.600	136.430	6378.80	545.24	-604.94	167.06	1748795.88	14436968.01	39°45'10.227"N	80°36'51.800"W	627.58	164.562	5.75	-0.81	5.69
6941.00	90.150	139.010	6378.98	628.13	-666.34	222.90	1748851.69	14436906.63	39°45'09.618"N	80°36'51.089"W	702.63	161.504	3.18	0.66	3.11
7025.00	89.570	134.730	6379.18	712.06	-727.63	280.31	1748909.08	14436845.36	39°45'09.010"N	80°36'50.357"W	779.76	158.931	5.14	-0.69	-5.10
7110.00	89.750	131.790	6379.69	797.01	-785.87	342.21	1748970.95	14436787.14	39°45'08.432"N	80°36'49.568"W	857.15	156.470	3.47	0.21	-3.46
7192.00	89.690	131.500	6380.09	878.88	-840.36	403.48	1749032.20	14436732.67	39°45'07.891"N	80°36'48.786"W	932.21	154.353	0.36	-0.07	-0.35
7276.00	89.720	129.240	6380.52	962.61	-894.77	467.47	1749096.17	14436678.29	39°45'07.350"N	80°36'47.970"W	1009.52	152.415	2.69	0.04	-2.69
7359.00	89.600	129.890	6381.01	1045.26	-947.63	531.46	1749160.13	14436625.44	39°45'06.825"N	80°36'47.154"W	1086.49	150.715	0.80	-0.14	0.78
7441.00	89.690	127.300	6381.52	1126.75	-998.78	595.54	1749224.19	14436574.32	39°45'06.317"N	80°36'46.336"W	1162.85	149.194	3.16	0.11	-3.16
7523.00	89.350	125.410	6382.21	1207.84	-1047.39	661.57	1749290.20	14436525.73	39°45'05.834"N	80°36'45.493"W	1238.83	147.722	2.34	-0.41	-2.30
7606.00	89.780	125.870	6382.84	1289.76	-1095.75	729.02	1749357.62	14436477.39	39°45'05.353"N	80°36'44.633"W	1316.11	146.363	0.76	0.52	0.55
7688.00	89.910	128.290	6383.06	1371.00	-1145.18	794.44	1749423.01	14436427.97	39°45'04.861"N	80°36'43.798"W	1393.76	145.250	2.96	0.16	2.95
7772.00	89.940	133.450	6383.17	1454.76	-1200.13	857.94	1749486.48	14436373.05	39°45'04.316"N	80°36'42.988"W	1475.25	144.440	6.14	0.04	6.14
7855.00	89.940	137.620	6383.26	1537.74	-1259.35	916.06	1749544.59	14436313.85	39°45'03.728"N	80°36'42.247"W	1557.29	143.968	5.02	0.00	5.02
7939.00	89.910	139.670	6383.37	1621.55	-1322.40	971.56	1749600.06	14436250.82	39°45'03.102"N	80°36'41.540"W	1640.94	143.695	2.44	-0.04	2.44
8022.00	89.940	134.880	6383.48	1704.46	-1383.36	1027.86	1749656.34	14436189.89	39°45'02.498"N	80°36'40.823"W	1723.42	143.387	5.77	0.04	-5.77
8106.00	89.910	130.210	6383.59	1788.36	-1440.14	1089.73	1749718.19	14436133.13	39°45'01.934"N	80°36'40.034"W	1805.97	142.886	5.56	-0.04	-5.56
8190.00	89.350	133.030	6384.13	1872.22	-1495.92	1152.52	1749780.95	14436077.37	39°45'01.380"N	80°36'39.233"W	1888.41	142.388	3.42	-0.67	3.36
8272.00	89.480	131.260	6384.96	1954.12	-1550.94	1213.31	1749841.72	14436022.37	39°45'00.834"N	80°36'38.457"W	1969.15	141.964	2.16	0.16	-2.16
8356.00	89.260	129.130	6385.89	2037.83	-1605.15	1277.47	1749905.85	14435968.19	39°45'00.295"N	80°36'37.639"W	2051.44	141.485	2.55	-0.26	-2.54
8438.00	88.980	128.790	6387.15	2119.38	-1656.70	1341.22	1749969.58	14435916.65	39°44'59.783"N	80°36'36.826"W	2131.56	141.007	0.54	-0.34	-0.41
8520.00	89.290	129.090	6388.39	2200.93	-1708.23	1404.99	1750033.33	14435865.14	39°44'59.271"N	80°36'36.012"W	2211.80	140.563	0.53	0.38	0.37

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# Actual Wellpath Report

Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

WELLPATH DATA (175 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]
8600.00	89.350	127.330	6389.34	2280.38	-1757.71	1467.85	1750096.16	14435815.68	39°44'58.779"N	80°36'35.210"W	2290.00	140.135	2.20	0.08	-2.20
8683.00	89.850	128.940	6389.91	2362.80	-1808.96	1533.13	1750161.41	14435764.45	39°44'58.270"N	80°36'34.377"W	2371.25	139.718	2.03	0.60	1.94
8766.00	89.750	129.690	6390.20	2445.41	-1861.55	1597.34	1750225.60	14435711.88	39°44'57.747"N	80°36'33.558"W	2452.93	139.368	0.91	-0.12	0.90
8849.00	89.690	136.300	6390.61	2528.32	-1918.12	1658.01	1750286.25	14435655.34	39°44'57.186"N	80°36'32.784"W	2535.39	139.160	7.96	-0.07	7.96
8933.00	89.780	138.550	6391.00	2612.23	-1979.97	1714.84	1750343.05	14435593.51	39°44'56.572"N	80°36'32.060"W	2619.34	139.104	2.68	0.11	2.68
9013.00	89.820	134.860	6391.28	2692.17	-2038.19	1769.69	1750397.88	14435535.32	39°44'55.994"N	80°36'31.361"W	2699.26	139.033	4.61	0.05	-4.61
9097.00	88.710	130.640	6392.36	2776.09	-2095.19	1831.35	1750459.52	14435478.34	39°44'55.428"N	80°36'30.575"W	2782.74	138.844	5.19	-1.32	-5.02
9181.00	88.250	130.670	6394.58	2859.83	-2149.89	1895.06	1750523.20	14435423.65	39°44'54.885"N	80°36'29.763"W	2865.88	138.605	0.55	-0.55	0.04
9265.00	87.880	130.880	6397.42	2943.56	-2204.72	1958.63	1750586.75	14435368.85	39°44'54.340"N	80°36'28.952"W	2949.07	138.383	0.51	-0.44	0.25
9348.00	88.000	131.570	6400.40	3026.34	-2259.38	2021.02	1750649.11	14435314.20	39°44'53.797"N	80°36'28.156"W	3031.39	138.187	0.84	0.14	0.83
9431.00	88.580	132.240	6402.88	3109.19	-2314.79	2082.76	1750710.83	14435258.81	39°44'53.247"N	80°36'27.369"W	3113.87	138.020	1.07	0.70	0.81
9514.00	88.580	130.950	6404.94	3192.03	-2369.88	2144.81	1750772.86	14435203.75	39°44'52.700"N	80°36'26.577"W	3196.33	137.854	1.55	0.00	-1.55
9598.00	88.650	133.970	6406.97	3275.92	-2426.56	2206.76	1750834.78	14435147.09	39°44'52.137"N	80°36'25.788"W	3279.94	137.716	3.60	0.08	3.60
9682.00	88.460	133.680	6409.09	3359.88	-2484.71	2267.34	1750895.34	14435088.97	39°44'51.560"N	80°36'25.015"W	3363.72	137.619	0.41	-0.23	-0.35
9764.00	88.520	130.260	6411.25	3441.73	-2539.52	2328.28	1750956.25	14435034.18	39°44'51.016"N	80°36'24.238"W	3445.29	137.485	4.17	0.07	-4.17
9847.00	88.680	132.010	6413.28	3524.53	-2594.10	2390.77	1751018.72	14434979.62	39°44'50.474"N	80°36'23.441"W	3527.77	137.336	2.12	0.19	2.11
9930.00	88.150	135.080	6415.57	3607.46	-2651.25	2450.90	1751078.83	14434922.49	39°44'49.906"N	80°36'22.675"W	3610.55	137.249	3.75	-0.64	3.70
10015.00	88.150	132.430	6418.32	3692.39	-2710.00	2512.26	1751140.16	14434863.76	39°44'49.323"N	80°36'21.892"W	3695.34	137.168	3.12	0.00	-3.12
10097.00	88.030	127.700	6421.05	3774.04	-2762.74	2574.96	1751202.84	14434811.05	39°44'48.799"N	80°36'21.093"W	3776.66	137.015	5.77	-0.15	-5.77
10181.00	88.150	124.770	6423.85	3857.03	-2812.35	2642.67	1751270.53	14434761.45	39°44'48.306"N	80°36'20.228"W	3859.15	136.782	3.49	0.14	-3.49
10263.00	87.910	128.970	6426.67	3938.16	-2861.51	2708.22	1751336.05	14434712.31	39°44'47.817"N	80°36'19.392"W	3939.89	136.577	5.13	-0.29	5.12
10348.00	88.090	131.880	6429.64	4022.84	-2916.59	2772.88	1751400.68	14434657.25	39°44'47.270"N	80°36'18.567"W	4024.35	136.447	3.43	0.21	3.42
10430.00	88.000	130.920	6432.44	4104.64	-2970.79	2834.35	1751462.13	14434603.08	39°44'46.732"N	80°36'17.783"W	4105.99	136.346	1.18	-0.11	-1.17
10515.00	88.460	135.470	6435.06	4189.54	-3028.93	2896.27	1751524.03	14434544.96	39°44'46.154"N	80°36'16.994"W	4190.80	136.283	5.38	0.54	5.35
10597.00	88.400	141.920	6437.31	4271.29	-3090.47	2950.35	1751578.08	14434483.44	39°44'45.544"N	80°36'16.305"W	4272.65	136.329	7.86	-0.07	7.87
10680.00	88.620	140.070	6439.47	4353.78	-3154.94	3002.57	1751630.28	14434418.99	39°44'44.904"N	80°36'15.640"W	4355.35	136.418	2.24	0.27	-2.23
10763.00	88.340	133.340	6441.68	4436.66	-3215.30	3059.43	1751687.12	14434358.66	39°44'44.305"N	80°36'14.916"W	4438.27	136.423	8.11	-0.34	-8.11
10845.00	88.610	130.220	6443.86	4518.50	-3269.91	3120.55	1751748.22	14434304.07	39°44'43.763"N	80°36'14.136"W	4519.97	136.339	3.82	0.33	-3.80
10928.00	88.060	126.970	6446.27	4600.96	-3321.65	3185.39	1751813.03	14434252.35	39°44'43.249"N	80°36'13.309"W	4602.18	136.200	3.97	-0.66	-3.92
11010.00	87.810	125.550	6449.23	4681.98	-3370.12	3251.46	1751879.08	14434203.90	39°44'42.767"N	80°36'12.466"W	4682.92	136.027	1.76	-0.30	-1.73

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## REFERENCE WELLPATH IDENTIFICATION

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Area	Marshall County, WV
Field	Marshall
Facility	Columbia Gas Transmission MSH Pad
Slot	Wellbore
Slot 9H	Columbia Gas Transmission MSH 9H

## WELLPATH DATA (175 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)	(N)	(W)	(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
11093.00	88.060	125.280	6452.22	4763.80	-3418.19	3319.06	1751946.65	14434155.85	39°44'42.28"N	80°36'11.60"W	4764.47	135.843	0.44	0.30	-0.33
11176.00	88.180	127.610	6454.94	-3467.46	3385.79	1752013.35	14434106.59	39°44'41.79"N	80°36'10.75"W	4846.32	135.683	2.81	0.14	2.81	2.81
11260.00	88.000	136.300	6457.74	-3523.54	3448.16	1752303.78	14434050.54	39°44'41.24"N	80°36'09.95"W	4930.02	135.619	10.34	-0.21	10.35	10.35
11343.00	88.060	134.770	6460.60	-3582.73	3506.26	1752137.78	14433991.37	39°44'40.65"N	80°36'09.21"W	5012.97	135.618	1.84	0.07	-1.84	-1.84
11427.00	88.000	134.580	6463.49	-3641.76	3565.96	1752193.46	14433932.46	39°44'40.06"N	80°36'08.45"W	5096.91	135.602	0.24	-0.07	-0.23	-0.23
11511.00	87.750	134.210	6466.60	-3700.48	3625.94	1752253.41	14433873.66	39°44'39.486"N	80°36'07.691"W	5180.83	135.583	0.53	-0.30	-0.44	-0.44
11592.00	88.370	133.800	6469.34	-3756.72	3684.17	1752311.62	14433817.45	39°44'38.927"N	80°36'06.949"W	5261.76	135.559	0.92	0.77	-0.51	-0.51
11677.00	87.540	130.310	6472.38	-3813.62	3747.23	1752374.65	14433760.58	39°44'38.362"N	80°36'06.145"W	5346.53	135.503	4.22	-0.98	-4.11	-4.11
11757.00	87.720	133.500	6475.69	-3866.99	3806.71	1752434.11	14433707.22	39°44'37.832"N	80°36'05.386"W	5426.30	135.450	3.99	0.23	3.99	3.99
11840.00	87.660	137.040	6479.03	-3925.90	3865.07	1752492.45	14433648.33	39°44'37.247"N	80°36'04.642"W	5509.22	135.447	4.26	-0.07	4.27	4.27
11924.00	87.540	136.720	6482.55	-3987.16	3922.43	1752549.79	14433587.10	39°44'36.639"N	80°36'03.912"W	5593.12	135.469	0.41	-0.14	-0.38	-0.38
12008.00	87.600	136.700	6486.11	-4048.25	3979.98	1752607.31	14433526.03	39°44'36.033"N	80°36'03.178"W	5677.02	135.487	0.08	0.07	-0.02	-0.02
12091.00	88.150	138.040	6489.19	-4092.27	4036.15	1752663.46	14433465.03	39°44'35.428"N	80°36'02.463"W	5759.92	135.514	1.74	0.66	1.61	1.61
12175.00	87.410	135.400	6492.44	-4170.38	4093.69	1752720.98	14433403.96	39°44'34.821"N	80°36'01.730"W	5843.83	135.532	3.26	-0.88	-3.14	-3.14
12260.00	87.630	133.500	6496.12	-4229.84	4164.31	1752781.58	14433344.51	39°44'34.231"N	80°36'00.957"W	5928.73	135.516	2.25	0.26	-2.24	-2.24
12342.00	87.600	130.790	6499.53	-4284.81	4215.05	1752842.29	14433289.56	39°44'33.685"N	80°36'00.183"W	6010.51	135.470	3.30	-0.04	-3.30	-3.30
12426.00	87.510	127.570	6503.12	-4337.82	4280.10	1752907.31	14433236.57	39°44'33.158"N	80°35'59.353"W	6093.93	135.384	3.83	-0.11	-3.83	-3.83
12510.00	88.060	126.920	6506.37	-4388.62	4346.91	1752974.10	14433185.79	39°44'32.653"N	80°35'58.500"W	6177.03	135.274	1.01	0.65	-0.77	-0.77
12594.00	87.570	129.280	6509.57	-4440.23	4412.96	1753040.13	14433134.02	39°44'32.138"N	80°35'57.658"W	6260.31	135.178	2.87	-0.58	2.81	2.81
12675.00	87.450	133.660	6513.09	-4493.99	4473.59	1753100.73	14433080.47	39°44'31.606"N	80°35'56.885"W	6341.05	135.130	5.40	-0.15	5.41	5.41
12758.00	87.480	132.760	6516.76	-4550.76	4534.02	1753161.14	14433023.72	39°44'31.043"N	80°35'56.114"W	6423.92	135.106	1.08	0.04	-1.08	-1.08
12843.00	87.630	130.870	6520.39	-4607.38	4597.31	1753224.40	14432967.12	39°44'30.480"N	80°35'55.307"W	6508.70	135.063	2.23	0.18	-2.22	-2.22
12927.00	88.000	128.240	6523.59	-4660.83	4662.02	1753289.09	14432913.69	39°44'29.949"N	80°35'54.482"W	6592.25	134.993	3.16	0.44	-3.13	-3.13
12994.00	87.540	124.840	6526.20	-4700.68	4715.80	1753342.85	14432873.85	39°44'29.553"N	80°35'53.796"W	6658.47	134.908	5.12	-0.69	-5.07	-5.07
13019.00	87.540	124.840	6527.27	-4714.95	4736.30	1753363.34	14432859.59	39°44'29.411"N	80°35'53.534"W	6683.06	134.871	0.00	0.00	0.00	0.00

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

HOLE & CASING SECTIONS										
- Ref Wellbore: Columbia Gas Transmission MSH 9H AWB      Ref Wellpath: Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD										
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	125.00	99.00	26.00	125.00	0.00	0.00	-0.06	0.36	
17.5in Open Hole	125.00	355.00	230.00	125.00	354.98	-0.06	0.36	-0.49	3.00	
13.375in Casing Surface	26.00	343.00	317.00	26.00	342.98	0.00	0.00	-0.47	2.91	
12.25in Open Hole	355.00	2067.00	1712.00	354.98	2065.02	-0.49	3.00	-57.21	-26.58	
9.625in Casing Intermediate	26.00	2047.00	2021.00	26.00	2045.04	0.00	0.00	-56.64	-25.81	
8.75in Open Hole	2067.00	5605.00	3538.00	2065.02	5585.34	-57.21	-26.58	-58.00	-368.66	
8.5in Open Hole	5605.00	13019.00	7414.00	5585.34	6527.27	-58.00	-368.66	-4714.95	4736.30	

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Columbia Gas Transmission MSH 9H LP Rev-1	6382.00	-560.00	120.25	1748749.08	14437012.93	39°45'10.673"N	80°36'52.397"W	point
Columbia Gas Transmission MSH 9H BHL Rev-1	6530.00	-4716.58	4736.84	1753363.88	14432857.96	39°44'29.395"N	80°35'53.528"W	point

WELLPATH COMPOSITION - Ref Wellbore: Columbia Gas Transmission MSH 9H AWB      Ref Wellpath: Columbia Gas Transmission MSH 9H AWP Proj: 13019'MD				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	316.00	BHI NaviTrak (Axial)	01_APS EM <17.5"> (207'-316')	Columbia Gas Transmission MSH 9H AWB
316.00	1989.00	BHI NaviTrak (Axial)	02_APS EM <12.25"> (316')(364'-1989')	Columbia Gas Transmission MSH 9H AWB
1989.00	5447.00	BHI NaviTrak (Axial)	03_APS EM <8.75">(1989')(2072'-5447')	Columbia Gas Transmission MSH 9H AWB
5447.00	12994.00	BHI AutoTrak Curve (Short)	04_BH AT Curve <8.5"> (5447')(5523'-12994')	Columbia Gas Transmission MSH 9H AWB
12994.00	13019.00	Blind Drilling (std)	Projection to bit	Columbia Gas Transmission MSH 9H AWB

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot 9H
Area	Marshall County, WV	Well	Columbia Gas Transmission MSH 9H
Field	Marshall	Wellbore	Columbia Gas Transmission MSH 9H AWB
Facility	Columbia Gas Transmission MSH Pad		

COMMENTS
<p><b>Wellpath general comments</b>                      API: 47-051-01942-0000                      Job#: 8990352                      Rig: SDC 42                      Duration: 02/13/2018 - 02/24/2018</p>

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