

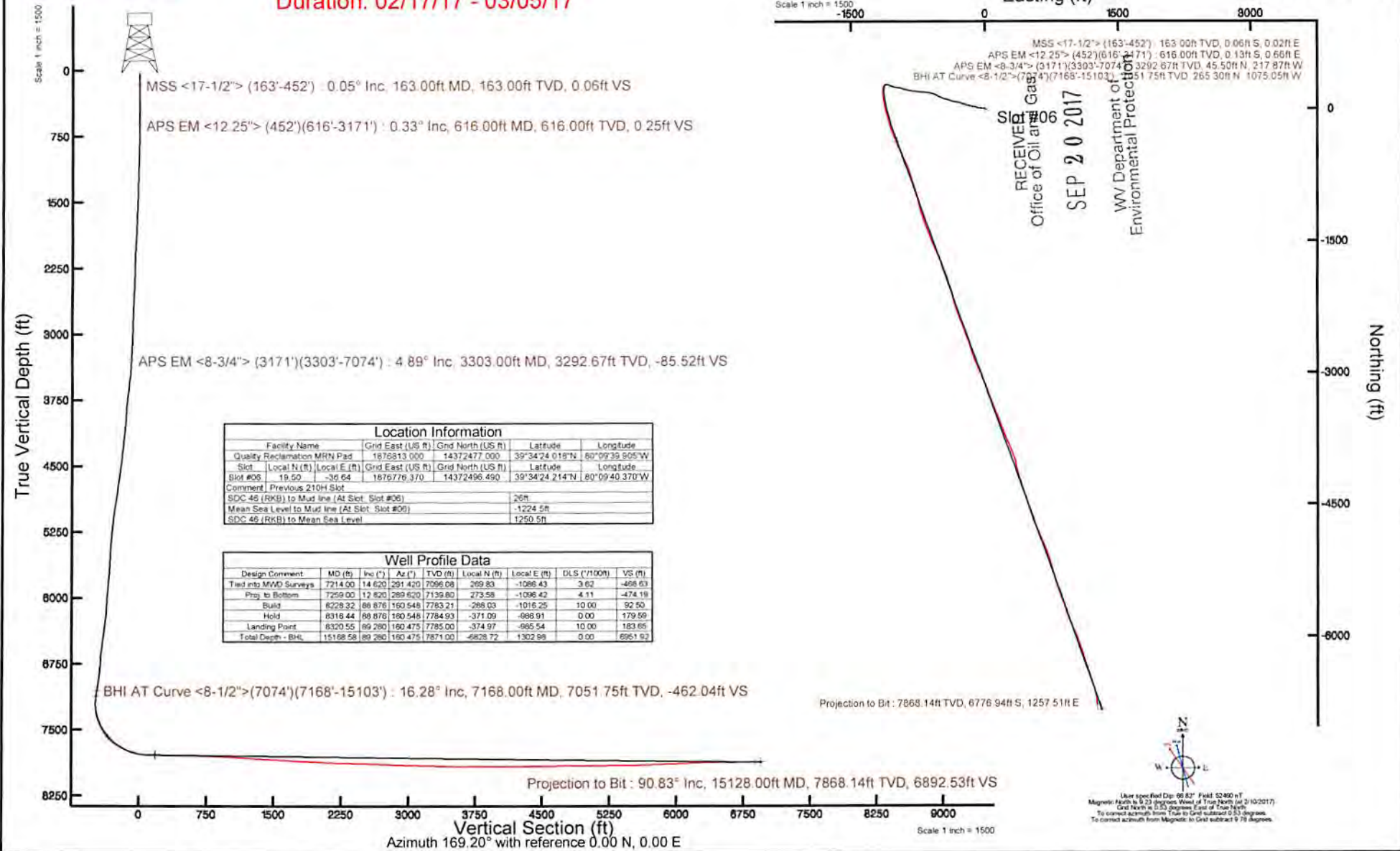
# SOUTHWESTERN ENERGY

Location: Marion County, WV Slot: Slot #06  
 Field: Marion Well: Quality Reclamation MRN 6H  
 Facility: Quality Reclamation MRN Pad Wellbore: Quality Reclamation MRN 6H PWB

Plot reference wellpath is Quality Reclamation MRN 6H PWB Rev-D 0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 46 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to SDC 46 (RKB)	North Reference: Grid north
SDC 46 (RKB) to Mean Sea Level: 1250.5 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot#06): -1224.5 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: amarcar on 2017-03-06
	Database: WA_MPL_EASTERNUS_Defn

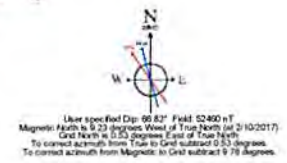


API: 47-049-02421-0000  
 Job#: 8407781  
 Rig: SDC-46  
 Duration: 02/17/17 - 03/05/17



Location Information						
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude		
Quality Reclamation MRN Pad	1876813.000	14372477.000	39°34'24.018"N	60°09'39.805"W		
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #06	19.50	-36.64	1876779.370	14372496.490	39°34'24.214"N	60°09'40.370"W
Comment: Previous 210H Slot						
SDC 46 (RKB) to Mud line (At Slot: Slot #06)			26ft			
Mean Sea Level to Mud line (At Slot: Slot #06)			-1224.5ft			
SDC 46 (RKB) to Mean Sea Level			1250.5ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tied into MWD Surveys	7214.00	14.620	291.420	7096.08	269.83	-1086.43	3.62	-468.63
Prog. to Bottom	7259.00	17.820	289.620	7139.80	273.58	-1096.42	4.11	-474.18
Build	8228.32	86.876	160.548	7783.21	-268.03	-1016.25	10.00	92.50
Hold	8318.44	86.876	160.548	7784.93	-371.09	-988.91	0.00	179.59
Landing Point	8320.55	89.280	160.475	7785.00	-374.97	-985.54	10.00	183.65
Total Depth - BHL	15168.58	89.280	160.475	7871.00	-6828.72	1302.98	0.00	6961.52





# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWP
Facility	Quality Reclamation MRN Pad		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 5.0
North Reference	Grid	User	Amarcar
Scale	0.999664	Report Generated	3/6/2017 at 2:59:20 PM
Convergence at slot	0.54° East	Database/Source file	WA_MPL_EASTERNUS_Defn/Quality_Reclamation_MRN_6H_AWP_Proj_15128_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	19.50	-36.64	1876776.37	14372496.49	39°34'24.214"N	80°09'40.370"W
Facility Reference Pt			1876813.00	14372477.00	39°34'24.018"N	80°09'39.905"W
Field Reference Pt			0.00	0.00	0°00'00.000"	85°29'19.478"W

WELLPATH DATUM			
Calculation method	Minimum curvature	SDC 46 (RKB) to Facility Vertical Datum	1250.50ft
Horizontal Reference Pt	Slot	SDC 46 (RKB) to Mean Sea Level	1250.50ft
Vertical Reference Pt	SDC 46 (RKB)	SDC 46 (RKB) to Mud Line at Slot (Slot #06)	26.00ft
MD Reference Pt	SDC 46 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	169.20°



# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

WELLPATH DATA (176 stations) † = interpolated/extrapolated station															
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
0.00†	0.000	163.810	0.00	0.00	0.00	0.00	1876776.37	14372496.49	39°34'24.214"N	80°09'40.370"W	0.00	0.000	0.00	0.00	0.00
26.00	0.000	163.810	26.00	0.00	0.00	0.00	1876776.37	14372496.49	39°34'24.214"N	80°09'40.370"W	0.00	0.000	0.00	0.00	0.00
163.00	0.050	163.810	163.00	0.06	-0.06	0.02	1876776.39	14372496.43	39°34'24.213"N	80°09'40.370"W	0.06	163.810	0.04	0.04	119.57
272.00	0.040	82.810	272.00	0.11	-0.10	0.07	1876776.44	14372496.39	39°34'24.213"N	80°09'40.369"W	0.12	145.459	0.05	-0.01	-74.31
359.00	0.100	65.110	359.00	0.09	-0.06	0.17	1876776.54	14372496.43	39°34'24.213"N	80°09'40.368"W	0.18	110.574	0.07	0.07	-20.34
452.00	0.400	111.610	452.00	0.25	-0.15	0.54	1876776.91	14372496.34	39°34'24.212"N	80°09'40.363"W	0.56	105.266	0.36	0.32	50.00
616.00	0.330	298.650	616.00	0.25	-0.13	0.66	1876777.03	14372496.36	39°34'24.212"N	80°09'40.362"W	0.67	101.342	0.44	-0.04	-105.46
709.00	0.600	307.580	708.99	-0.28	0.29	0.04	1876776.41	14372496.78	39°34'24.217"N	80°09'40.370"W	0.30	7.571	0.30	0.29	9.60
802.00	1.370	302.570	801.98	-1.41	1.19	-1.28	1876775.09	14372497.68	39°34'24.226"N	80°09'40.386"W	1.75	312.790	0.83	0.83	-5.39
894.00	2.340	290.690	893.93	-3.14	2.44	-3.97	1876772.40	14372498.93	39°34'24.238"N	80°09'40.421"W	4.66	301.633	1.13	1.05	-12.91
987.00	3.310	278.080	986.82	-5.00	3.49	-8.40	1876767.97	14372499.98	39°34'24.249"N	80°09'40.477"W	9.10	292.570	1.23	1.04	-13.56
1080.00	4.410	276.330	1079.61	-6.93	4.26	-14.61	1876761.76	14372500.75	39°34'24.257"N	80°09'40.556"W	15.22	286.265	1.19	1.18	-1.88
1173.00	5.980	276.610	1172.22	-9.43	5.22	-22.98	1876753.40	14372501.70	39°34'24.267"N	80°09'40.663"W	23.57	282.788	1.69	1.69	0.30
1266.00	5.710	277.830	1264.74	-12.36	6.40	-32.38	1876744.00	14372502.89	39°34'24.280"N	80°09'40.783"W	33.00	281.188	0.32	-0.29	1.31
1358.00	4.970	271.710	1356.34	-14.68	7.15	-40.89	1876735.49	14372503.63	39°34'24.288"N	80°09'40.892"W	41.51	279.912	1.01	-0.80	-6.65
1451.00	6.170	274.180	1448.90	-16.85	7.63	-49.91	1876726.48	14372504.12	39°34'24.294"N	80°09'41.007"W	50.49	278.693	1.32	1.29	2.66
1544.00	6.680	278.490	1541.31	-19.93	8.79	-60.24	1876716.15	14372505.28	39°34'24.306"N	80°09'41.138"W	60.88	278.305	0.75	0.55	4.63
1637.00	6.890	276.400	1633.66	-23.36	10.21	-71.13	1876705.26	14372506.70	39°34'24.321"N	80°09'41.277"W	71.86	278.171	0.35	0.23	-2.25
1729.00	6.240	277.120	1725.06	-26.53	11.45	-81.58	1876694.82	14372507.94	39°34'24.334"N	80°09'41.411"W	82.38	277.989	0.71	-0.71	0.78
1822.00	5.040	289.730	1817.61	-30.16	13.45	-90.44	1876685.96	14372509.94	39°34'24.355"N	80°09'41.524"W	91.44	278.462	1.85	-1.29	13.56
1915.00	5.280	295.200	1910.23	-34.75	16.66	-98.16	1876678.25	14372513.14	39°34'24.387"N	80°09'41.622"W	99.56	279.630	0.59	0.26	5.88
2007.00	5.690	292.320	2001.81	-39.73	20.19	-106.21	1876670.20	14372516.67	39°34'24.423"N	80°09'41.724"W	108.11	280.764	0.54	0.45	-3.13
2100.00	5.690	285.390	2094.36	-44.29	23.16	-114.92	1876661.49	14372519.65	39°34'24.453"N	80°09'41.835"W	117.23	281.397	0.74	0.00	-7.45
2193.00	5.610	277.530	2186.90	-47.75	24.98	-123.87	1876652.54	14372521.47	39°34'24.472"N	80°09'41.949"W	126.36	281.403	0.84	-0.09	-8.45
2286.00	5.570	278.260	2279.46	-50.66	26.23	-132.84	1876643.57	14372522.71	39°34'24.485"N	80°09'42.063"W	135.41	281.169	0.09	-0.04	0.78
2379.00	5.260	275.210	2372.05	-53.30	27.26	-141.55	1876634.87	14372523.74	39°34'24.496"N	80°09'42.175"W	144.15	280.902	0.45	-0.33	-3.28
2471.00	5.080	280.690	2463.67	-55.96	28.40	-149.75	1876626.67	14372524.88	39°34'24.508"N	80°09'42.279"W	152.42	280.739	0.57	-0.20	5.96
2564.00	4.810	280.650	2556.33	-58.89	29.89	-157.63	1876618.79	14372526.37	39°34'24.524"N	80°09'42.380"W	160.44	280.736	0.29	-0.29	-0.04
2657.00	5.090	277.150	2648.98	-61.59	31.12	-165.56	1876610.87	14372527.60	39°34'24.537"N	80°09'42.481"W	168.46	280.646	0.44	0.30	-3.76
2749.00	4.930	280.330	2740.63	-64.27	32.34	-173.50	1876602.93	14372528.82	39°34'24.549"N	80°09'42.582"W	176.48	280.558	0.35	-0.17	3.46



# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWP
Facility	Quality Reclamation MRN Pad		

WELLPATH DATA (176 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]
2842.00	4.980	282.670	2833.28	-67.32	33.94	-181.37	1876595.06	14372530.42	39°34'24.566"N	80°09'42.682"W	184.51	280.599	0.22	0.05	2.52
2935.00	4.810	279.330	2925.94	-70.27	35.46	-189.15	1876587.28	14372531.93	39°34'24.582"N	80°09'42.781"W	192.45	280.617	0.36	-0.18	-3.59
3027.00	4.380	285.750	3017.65	-73.17	37.04	-196.34	1876580.10	14372533.51	39°34'24.598"N	80°09'42.873"W	199.80	280.682	0.73	-0.47	6.98
3120.00	4.890	293.430	3110.34	-76.99	39.58	-203.39	1876573.04	14372536.05	39°34'24.624"N	80°09'42.963"W	207.21	281.011	0.86	0.55	8.26
3171.00	4.920	293.590	3161.16	-79.44	41.32	-207.39	1876569.05	14372537.79	39°34'24.641"N	80°09'43.014"W	211.47	281.266	0.06	0.06	0.31
3303.00	4.890	289.940	3292.67	-85.52	45.50	-217.87	1876558.57	14372541.97	39°34'24.684"N	80°09'43.147"W	222.57	281.796	0.24	-0.02	-2.77
3396.00	8.030	292.640	3385.07	-91.12	49.35	-227.59	1876548.85	14372545.83	39°34'24.723"N	80°09'43.271"W	232.88	282.235	3.39	3.38	2.90
3488.00	10.440	293.670	3475.87	-99.38	55.17	-241.16	1876535.29	14372551.64	39°34'24.781"N	80°09'43.443"W	247.39	282.886	2.63	2.62	1.12
3581.00	12.870	289.560	3566.95	-109.39	62.02	-258.64	1876517.82	14372558.49	39°34'24.851"N	80°09'43.666"W	265.97	283.485	2.76	2.61	-4.42
3674.00	13.620	287.930	3657.48	-119.89	68.86	-278.82	1876497.65	14372565.33	39°34'24.920"N	80°09'43.923"W	287.20	283.873	0.90	0.81	-1.75
3766.00	13.860	282.170	3746.85	-129.40	74.52	-299.90	1876476.57	14372570.99	39°34'24.978"N	80°09'44.191"W	309.02	283.955	1.51	0.26	-6.26
3859.00	13.790	278.250	3837.16	-137.36	78.46	-321.76	1876454.72	14372574.92	39°34'25.019"N	80°09'44.470"W	331.18	283.704	1.01	-0.08	-4.22
3952.00	11.700	276.640	3927.86	-143.81	81.14	-342.09	1876434.39	14372577.60	39°34'25.047"N	80°09'44.729"W	351.58	283.343	2.28	-2.25	-1.73
4045.00	10.130	283.180	4019.18	-149.96	84.10	-359.42	1876417.07	14372580.56	39°34'25.078"N	80°09'44.950"W	369.13	283.169	2.15	-1.69	7.03
4137.00	11.420	288.520	4109.56	-157.71	88.83	-375.94	1876400.56	14372585.29	39°34'25.126"N	80°09'45.160"W	386.29	283.295	1.77	1.40	5.80
4230.00	13.490	288.340	4200.36	-167.50	95.17	-394.97	1876381.54	14372591.63	39°34'25.191"N	80°09'45.403"W	406.27	283.548	2.23	2.23	-0.19
4323.00	14.040	287.410	4290.69	-178.11	101.96	-416.03	1876360.48	14372598.42	39°34'25.260"N	80°09'45.671"W	428.34	283.771	0.64	0.59	-1.00
4416.00	13.910	287.390	4380.94	-188.72	108.68	-437.46	1876339.06	14372605.13	39°34'25.328"N	80°09'45.944"W	450.76	283.952	0.14	-0.14	-0.02
4509.00	13.640	287.760	4471.26	-199.25	115.36	-458.57	1876317.95	14372611.81	39°34'25.396"N	80°09'46.212"W	472.86	284.121	0.31	-0.29	0.40
4602.00	13.090	289.240	4561.75	-209.76	122.18	-478.96	1876297.57	14372618.63	39°34'25.465"N	80°09'46.472"W	494.30	284.311	0.70	-0.59	1.59
4694.00	13.280	293.280	4651.32	-220.90	129.79	-498.50	1876278.04	14372626.23	39°34'25.542"N	80°09'46.721"W	515.12	284.593	1.02	0.21	4.39
4787.00	12.790	295.520	4741.93	-232.98	138.45	-517.60	1876258.94	14372634.89	39°34'25.630"N	80°09'46.964"W	535.80	284.975	0.76	-0.53	2.41
4880.00	13.300	296.830	4832.53	-245.61	147.71	-536.44	1876240.11	14372644.15	39°34'25.723"N	80°09'47.203"W	556.40	285.395	0.63	0.55	1.41
4973.00	14.640	295.430	4922.77	-259.09	157.58	-556.60	1876219.96	14372654.02	39°34'25.822"N	80°09'47.459"W	578.48	285.808	1.49	1.44	-1.51
5065.00	16.010	289.100	5011.51	-272.29	166.73	-579.09	1876197.48	14372663.16	39°34'25.915"N	80°09'47.745"W	602.61	286.062	2.35	1.49	-6.88
5158.00	15.730	283.720	5100.97	-283.91	173.92	-603.46	1876173.12	14372670.35	39°34'25.988"N	80°09'48.056"W	628.02	286.077	1.61	-0.30	-5.78
5251.00	15.010	281.320	5190.64	-293.68	179.27	-627.51	1876149.07	14372675.70	39°34'26.043"N	80°09'48.362"W	652.62	285.944	1.03	-0.77	-2.58
5343.00	14.850	280.140	5279.53	-302.38	183.68	-650.80	1876125.79	14372680.11	39°34'26.089"N	80°09'48.659"W	676.22	285.761	0.37	-0.17	-1.28
5436.00	14.750	278.110	5369.45	-310.47	187.45	-674.25	1876102.35	14372683.88	39°34'26.128"N	80°09'48.958"W	699.82	285.537	0.57	-0.11	-2.18
5529.00	13.230	273.760	5459.69	-316.99	189.82	-696.59	1876080.01	14372686.25	39°34'26.154"N	80°09'49.243"W	721.99	285.243	1.99	-1.63	-4.68



# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

WELLPATH DATA (176 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]
5621.00	12.600	269.070	5549.37	-321.35	190.35	-717.13	1876059.48	14372686.77	39°34'26.161"N	80°09'49.505"W	741.96	284.865	1.33	-0.68	-5.10
5717.00	11.650	275.990	5643.23	-325.95	191.19	-737.24	1876039.38	14372687.61	39°34'26.171"N	80°09'49.762"W	761.63	284.538	1.81	-0.99	7.21
5810.00	11.770	280.130	5734.29	-332.05	193.84	-755.92	1876020.71	14372690.26	39°34'26.199"N	80°09'50.000"W	780.38	284.382	0.91	0.13	4.45
5903.00	12.670	279.010	5825.19	-338.89	197.10	-775.33	1876001.30	14372693.53	39°34'26.233"N	80°09'50.248"W	799.99	284.263	1.00	0.97	-1.20
5995.00	13.820	276.260	5914.74	-345.54	199.88	-796.22	1875980.42	14372696.30	39°34'26.262"N	80°09'50.514"W	820.92	284.092	1.42	1.25	-2.99
6088.00	14.230	277.000	6004.97	-352.29	202.49	-818.61	1875958.04	14372698.91	39°34'26.290"N	80°09'50.800"W	843.28	283.893	0.48	0.44	0.80
6181.00	12.740	279.630	6095.40	-359.36	205.59	-840.06	1875936.59	14372702.01	39°34'26.323"N	80°09'51.073"W	864.85	283.752	1.73	-1.60	2.83
6274.00	13.190	279.340	6186.03	-366.60	209.03	-860.64	1875916.02	14372705.45	39°34'26.359"N	80°09'51.336"W	885.66	283.652	0.49	0.48	-0.31
6367.00	14.270	285.010	6276.37	-375.24	213.72	-882.18	1875894.48	14372710.14	39°34'26.407"N	80°09'51.610"W	907.70	283.618	1.85	1.16	6.10
6460.00	13.780	288.330	6366.60	-385.62	220.17	-903.77	1875872.91	14372716.59	39°34'26.473"N	80°09'51.885"W	930.20	283.692	1.01	-0.53	3.57
6553.00	15.420	289.470	6456.60	-397.25	227.78	-925.94	1875850.74	14372724.19	39°34'26.550"N	80°09'52.167"W	953.55	283.820	1.79	1.76	1.23
6645.00	16.510	285.660	6545.05	-409.24	235.39	-950.06	1875826.63	14372731.80	39°34'26.627"N	80°09'52.475"W	978.79	283.915	1.64	1.18	-4.14
6738.00	15.700	279.820	6634.41	-419.56	241.10	-975.19	1875801.51	14372737.51	39°34'26.686"N	80°09'52.795"W	1004.55	283.887	1.95	-0.87	-6.28
6831.00	13.100	274.910	6724.48	-426.85	244.15	-998.09	1875778.62	14372740.55	39°34'26.718"N	80°09'53.087"W	1027.52	283.745	3.09	-2.80	-5.28
6924.00	12.710	280.770	6815.13	-433.46	246.96	-1018.64	1875758.07	14372743.37	39°34'26.748"N	80°09'53.349"W	1048.15	283.628	1.47	-0.42	6.30
7016.00	13.280	287.540	6904.78	-442.20	252.04	-1038.66	1875738.06	14372748.44	39°34'26.800"N	80°09'53.604"W	1068.80	283.640	1.77	0.62	7.36
7074.00	14.400	289.540	6961.10	-449.00	256.46	-1051.81	1875724.91	14372752.86	39°34'26.845"N	80°09'53.771"W	1082.62	283.703	2.10	1.93	3.45
7168.00	16.280	291.980	7051.75	-462.04	265.30	-1075.05	1875701.69	14372761.70	39°34'26.935"N	80°09'54.067"W	1107.30	283.862	2.11	2.00	2.60
7214.00	14.620	291.420	7096.08	-468.63	269.83	-1086.43	1875690.31	14372766.23	39°34'26.980"N	80°09'54.212"W	1119.44	283.948	3.62	-3.61	-1.22
7260.00	12.520	286.530	7140.80	-474.02	273.37	-1096.62	1875680.12	14372769.77	39°34'27.016"N	80°09'54.342"W	1130.18	283.998	5.20	-4.57	-10.63
7303.00	10.380	270.860	7182.95	-476.94	274.76	-1104.96	1875671.78	14372771.15	39°34'27.031"N	80°09'54.448"W	1138.61	283.964	8.74	-4.98	-36.44
7350.00	9.960	250.630	7229.23	-477.19	273.47	-1113.03	1875663.71	14372769.87	39°34'27.019"N	80°09'54.551"W	1146.14	283.804	7.61	-0.89	-43.04
7396.00	11.380	228.340	7274.45	-474.27	269.13	-1120.18	1875656.57	14372765.53	39°34'26.977"N	80°09'54.643"W	1152.06	283.510	9.42	3.09	-48.46
7443.00	14.270	214.190	7320.28	-467.79	261.26	-1126.90	1875649.85	14372757.66	39°34'26.899"N	80°09'54.730"W	1156.79	283.053	9.04	6.15	-30.11
7489.00	17.480	204.070	7364.53	-458.11	250.25	-1132.91	1875643.85	14372746.66	39°34'26.791"N	80°09'54.808"W	1160.22	282.456	9.19	6.98	-22.00
7535.00	21.280	194.930	7407.93	-444.91	235.87	-1137.88	1875638.88	14372732.28	39°34'26.649"N	80°09'54.873"W	1162.07	281.711	10.55	8.26	-19.87
7582.00	24.980	186.640	7451.15	-427.75	217.76	-1141.23	1875635.53	14372714.18	39°34'26.471"N	80°09'54.918"W	1161.82	280.803	10.47	7.87	-17.64
7628.00	28.960	179.560	7492.15	-407.51	196.96	-1142.26	1875634.49	14372693.39	39°34'26.265"N	80°09'54.934"W	1159.12	279.784	11.10	8.65	-15.39
7675.00	32.640	176.820	7532.52	-383.75	172.92	-1141.47	1875635.28	14372669.35	39°34'26.028"N	80°09'54.926"W	1154.50	278.614	8.38	7.83	-5.83
7721.00	37.420	174.340	7570.18	-357.52	146.61	-1139.40	1875637.35	14372643.05	39°34'25.767"N	80°09'54.903"W	1148.80	277.332	10.84	10.39	-5.39



# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

WELLPATH DATA (176 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]
7767.00	43.170	172.410	7605.25	-327.86	117.08	-1135.95	1875640.81	14372613.53	39°34'25.475"N	80°09'54.862"W	1141.96	275.885	12.79	12.50	-4.20
7814.00	48.720	170.470	7637.92	-294.12	83.70	-1130.89	1875645.86	14372580.16	39°34'25.145"N	80°09'54.802"W	1133.99	274.233	12.17	11.81	-4.13
7860.00	53.950	168.700	7666.65	-258.22	48.39	-1124.38	1875652.37	14372544.86	39°34'24.795"N	80°09'54.723"W	1125.42	272.464	11.76	11.37	-3.85
7907.00	59.860	166.800	7692.30	-218.88	9.94	-1116.01	1875660.74	14372506.42	39°34'24.415"N	80°09'54.620"W	1116.06	270.510	13.02	12.57	-4.04
7953.00	64.870	166.020	7713.63	-178.19	-29.66	-1106.43	1875670.31	14372466.84	39°34'24.022"N	80°09'54.503"W	1106.83	268.464	10.99	10.89	-1.70
7999.00	68.940	165.770	7731.67	-135.96	-70.69	-1096.12	1875680.62	14372425.83	39°34'23.616"N	80°09'54.376"W	1098.40	266.310	8.86	8.85	-0.54
8046.00	72.050	165.520	7747.36	-91.74	-113.60	-1085.14	1875691.60	14372382.93	39°34'23.191"N	80°09'54.241"W	1091.07	264.024	6.64	6.62	-0.53
8092.00	74.550	164.090	7760.58	-47.82	-156.12	-1073.59	1875703.15	14372340.43	39°34'22.770"N	80°09'54.098"W	1084.88	261.726	6.20	5.43	-3.11
8138.00	78.260	162.170	7771.39	-3.37	-198.89	-1060.61	1875716.12	14372297.67	39°34'22.346"N	80°09'53.938"W	1079.10	259.379	9.03	8.07	-4.17
8185.00	81.260	160.550	7779.75	42.44	-242.71	-1045.83	1875730.90	14372253.86	39°34'21.911"N	80°09'53.754"W	1073.62	256.934	7.23	6.38	-3.45
8278.00	88.000	157.550	7788.45	133.52	-329.12	-1012.73	1875763.98	14372167.49	39°34'21.054"N	80°09'53.342"W	1064.87	251.997	7.93	7.25	-3.23
8370.00	88.550	156.680	7791.22	223.44	-413.83	-976.97	1875799.73	14372082.80	39°34'20.214"N	80°09'52.895"W	1061.00	247.043	1.12	0.60	-0.95
8463.00	88.830	154.710	7793.34	313.84	-498.57	-938.70	1875837.98	14371998.09	39°34'19.373"N	80°09'52.417"W	1062.89	242.026	2.14	0.30	-2.12
8555.00	89.320	155.980	7794.83	403.15	-582.17	-900.33	1875876.34	14371914.52	39°34'18.543"N	80°09'51.936"W	1072.15	237.113	1.48	0.53	1.38
8648.00	89.380	158.140	7795.89	494.06	-667.80	-864.09	1875912.57	14371828.92	39°34'17.694"N	80°09'51.484"W	1092.06	232.302	2.32	0.06	2.32
8741.00	88.030	162.420	7797.99	585.89	-755.30	-832.72	1875943.93	14371741.44	39°34'16.826"N	80°09'51.094"W	1124.24	227.791	4.82	-1.45	4.60
8833.00	88.060	164.100	7801.13	677.34	-843.35	-806.24	1875970.40	14371653.43	39°34'15.954"N	80°09'50.766"W	1166.73	223.711	1.83	0.03	1.83
8926.00	88.620	164.290	7803.82	769.94	-932.79	-780.92	1875995.71	14371564.01	39°34'15.067"N	80°09'50.453"W	1216.53	219.936	0.64	0.60	0.20
9018.00	87.040	164.720	7807.30	861.56	-1021.38	-756.36	1876020.27	14371475.45	39°34'14.189"N	80°09'50.150"W	1270.95	216.521	1.78	-1.72	0.47
9111.00	86.680	165.690	7812.40	954.20	-1111.16	-732.65	1876043.97	14371385.70	39°34'13.300"N	80°09'49.858"W	1330.96	213.399	1.11	-0.39	1.04
9204.00	86.300	163.670	7818.09	1046.73	-1200.69	-708.12	1876068.49	14371296.21	39°34'12.413"N	80°09'49.555"W	1393.95	210.531	2.21	-0.41	-2.17
9297.00	86.610	159.010	7823.85	1138.65	-1288.60	-678.43	1876098.17	14371208.32	39°34'11.541"N	80°09'49.187"W	1456.29	207.766	5.01	0.33	-5.01
9390.00	87.080	160.550	7828.96	1230.26	-1375.74	-646.34	1876130.25	14371121.22	39°34'10.677"N	80°09'48.787"W	1520.00	205.165	1.73	0.51	1.66
9482.00	87.290	159.010	7833.48	1320.90	-1461.96	-614.58	1876162.00	14371035.02	39°34'09.822"N	80°09'48.392"W	1585.89	202.801	1.69	0.23	-1.67
9575.00	86.830	155.710	7838.25	1411.79	-1547.67	-578.84	1876197.73	14370949.34	39°34'08.972"N	80°09'47.946"W	1652.37	200.506	3.58	-0.49	-3.55
9668.00	87.200	156.120	7843.10	1502.18	-1632.46	-540.93	1876235.62	14370864.58	39°34'08.131"N	80°09'47.472"W	1719.75	198.333	0.59	0.40	0.44
9761.00	87.110	157.610	7847.71	1592.92	-1717.87	-504.44	1876272.10	14370779.20	39°34'07.283"N	80°09'47.016"W	1790.40	196.365	1.60	-0.10	1.60
9853.00	86.460	159.010	7852.87	1683.12	-1803.22	-470.49	1876306.04	14370693.88	39°34'06.437"N	80°09'46.593"W	1863.59	194.623	1.68	-0.71	1.52
9946.00	86.430	160.510	7858.64	1774.68	-1890.31	-438.38	1876338.14	14370606.82	39°34'05.573"N	80°09'46.193"W	1940.47	193.057	1.61	-0.03	1.61
10039.00	86.800	160.870	7864.13	1866.49	-1977.92	-407.68	1876368.82	14370519.24	39°34'04.704"N	80°09'45.811"W	2019.50	191.647	0.55	0.40	0.39



Southwestern Energy

# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128

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## REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Area	Marion County, WV
Field	Marion
Facility	Quality Reclamation MRN Pad
Slot	Slot #06
Quality Reclamation MRN 6H	Well
Quality Reclamation MRN 6H AWP	Wellbore

## WELLPATH DATA (176 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)	(°)	(ft/100ft)	(ft/100ft)	(°/100ft)
10132.00	87.290	163.870	7868.93	1958.70	-2066.43	-379.56	1876396.94	14370430.76	39°34'03.827"N	80°09'45.463"W	2100.99	190.408	3.26	0.53	3.23
10225.00	86.550	166.590	7873.93	2051.33	-2156.21	-355.88	1876420.61	14370341.01	39°34'02.938"N	80°09'45.171"W	2185.39	189.372	3.03	-0.80	2.92
10317.00	86.580	163.320	7879.44	2142.90	-2244.89	-332.05	1876444.43	14370252.36	39°34'02.059"N	80°09'44.877"W	2269.31	188.414	3.55	0.03	-3.55
10410.00	88.920	160.620	7883.09	2235.08	-2333.24	-303.29	1876473.18	14370164.04	39°34'01.183"N	80°09'44.521"W	2352.87	187.406	3.84	2.52	-2.90
10503.00	88.770	158.340	7884.97	2326.72	-2420.31	-270.70	1876505.76	14370076.99	39°34'00.320"N	80°09'44.115"W	2435.40	186.382	2.46	-0.16	-2.45
10595.00	88.550	161.170	7887.12	2417.44	-2506.60	-238.88	1876537.58	14369990.74	39°33'59.464"N	80°09'43.719"W	2517.95	185.444	3.08	-0.24	3.08
10688.00	88.450	158.860	7889.54	2509.21	-2593.96	-207.10	1876569.34	14369903.41	39°33'58.598"N	80°09'43.324"W	2602.22	184.565	2.48	-0.10	-2.48
10781.00	87.600	161.900	7892.74	2601.04	-2681.50	-175.90	1876600.53	14369815.90	39°33'57.730"N	80°09'42.935"W	2687.26	183.753	3.40	-0.92	3.27
10874.00	87.480	163.510	7896.73	2693.36	-2770.21	-148.28	1876628.14	14369727.22	39°33'56.851"N	80°09'42.593"W	2774.17	183.064	1.73	-0.13	1.73
10966.00	87.290	159.610	7900.93	2784.43	-2857.38	-119.21	1876657.20	14369640.08	39°33'55.986"N	80°09'42.233"W	2859.86	182.389	4.24	-0.21	-4.24
11059.00	88.650	157.070	7904.23	2875.70	-2943.75	-84.91	1876691.49	14369553.74	39°33'55.130"N	80°09'41.805"W	2944.97	181.652	3.10	1.46	-2.73
11152.00	88.580	155.690	7906.48	2966.35	-3028.93	-47.66	1876728.73	14369468.58	39°33'54.284"N	80°09'41.339"W	3029.30	180.901	1.49	-0.08	-1.48
11244.00	88.430	158.890	7908.88	3056.33	-3113.76	-12.16	1876764.22	14369383.79	39°33'53.443"N	80°09'40.896"W	3113.78	180.224	3.48	-0.16	3.48
11337.00	88.430	158.670	7911.42	3147.76	-3200.42	21.49	1876797.85	14369297.15	39°33'52.583"N	80°09'40.477"W	3200.49	179.615	0.24	0.00	-0.24
11430.00	88.400	159.890	7914.00	3239.33	-3287.37	54.38	1876830.73	14369210.23	39°33'51.721"N	80°09'40.067"W	3287.82	179.052	1.31	-0.03	1.31
11523.00	88.520	158.970	7916.50	3330.95	-3374.41	87.05	1876863.39	14369123.22	39°33'50.858"N	80°09'39.661"W	3375.53	178.522	1.00	0.13	-0.99
11616.00	88.450	158.030	7918.95	3422.30	-3467.44	121.12	1876897.45	14369036.76	39°33'49.000"N	80°09'39.236"W	3463.02	177.996	1.01	-0.06	-1.01
11709.00	88.580	159.090	7921.35	3513.67	-3547.99	155.10	1876931.42	14368950.25	39°33'48.141"N	80°09'38.812"W	3550.83	177.497	1.15	0.13	1.14
11801.00	88.430	159.110	7923.75	3604.21	-3633.36	187.91	1876964.21	14368864.36	39°33'47.289"N	80°09'38.404"W	3638.21	177.039	0.16	-0.16	0.02
11894.00	89.880	158.390	7925.12	3695.65	-3720.02	221.61	1876997.91	14368777.73	39°33'47.430"N	80°09'37.984"W	3726.62	176.591	1.74	1.56	-0.77
11987.00	89.780	155.820	7925.40	3786.58	-3805.69	257.79	1877034.07	14368692.09	39°33'46.580"N	80°09'37.532"W	3814.41	176.125	2.77	-0.11	-2.76
12079.00	90.250	158.290	7925.37	3876.52	-3890.40	293.65	1877069.92	14368607.40	39°33'45.739"N	80°09'37.084"W	3901.47	175.683	2.73	0.51	2.68
12172.00	90.340	164.980	7924.89	3968.65	-3978.61	322.94	1877099.20	14368519.22	39°33'44.865"N	80°09'36.721"W	3991.70	175.360	7.19	0.10	7.19
12265.00	90.120	167.280	7924.52	4061.51	-4068.89	345.23	1877121.48	14368428.97	39°33'43.971"N	80°09'36.447"W	4083.51	175.150	2.48	-0.24	2.47
12358.00	90.180	165.030	7924.28	4154.37	-4159.19	367.48	1877143.73	14368338.71	39°33'43.076"N	80°09'36.173"W	4175.39	174.951	2.42	0.06	-2.42
12451.00	91.050	162.150	7923.28	4246.91	-4248.38	393.75	1877169.99	14368249.54	39°33'42.192"N	80°09'35.849"W	4266.59	174.705	3.23	0.94	-3.10
12543.00	91.140	162.020	7921.52	4338.19	-4335.91	422.04	1877198.27	14368162.05	39°33'41.325"N	80°09'35.498"W	4356.40	174.441	0.17	0.10	-0.14
12636.00	90.950	161.640	7919.82	4430.40	-4424.25	451.04	1877227.26	14368073.73	39°33'40.449"N	80°09'35.138"W	4447.18	174.179	0.46	-0.20	-0.41
12729.00	90.920	163.280	7918.31	4522.75	-4512.91	479.06	1877255.27	14367985.10	39°33'39.570"N	80°09'34.791"W	4538.27	173.941	1.76	-0.03	1.76
12821.00	90.920	162.120	7916.83	4614.14	-4600.74	506.42	1877282.62	14367897.31	39°33'38.700"N	80°09'34.452"W	4628.53	173.719	1.26	0.00	-1.26



# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

WELLPATH DATA (176 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]
12914.00	90.580	159.000	7915.61	4706.07	-4688.42	537.36	1877313.55	14367809.66	39°33'37.830"N	80°09'34.068"W	4719.11	173.462	3.37	-0.37	-3.35
13007.00	90.430	156.280	7914.79	4797.17	-4774.42	572.74	1877348.91	14367723.69	39°33'36.977"N	80°09'33.626"W	4808.65	173.159	2.93	-0.16	-2.92
13100.00	90.430	156.080	7914.09	4887.77	-4859.49	610.30	1877386.46	14367638.64	39°33'36.133"N	80°09'33.157"W	4897.66	172.842	0.22	0.00	-0.22
13192.00	90.490	157.530	7913.35	4977.62	-4944.05	646.53	1877422.68	14367554.11	39°33'35.294"N	80°09'32.704"W	4986.14	172.550	1.58	0.07	1.58
13285.00	90.460	159.640	7912.58	5069.02	-5030.62	680.48	1877456.62	14367467.57	39°33'34.435"N	80°09'32.281"W	5076.44	172.296	2.27	-0.03	2.27
13378.00	90.550	162.080	7911.76	5161.03	-5118.47	710.97	1877487.10	14367379.75	39°33'33.564"N	80°09'31.902"W	5167.61	172.092	2.63	0.10	2.62
13471.00	90.550	165.560	7910.87	5253.60	-5207.77	736.88	1877513.00	14367290.48	39°33'32.679"N	80°09'31.582"W	5259.64	171.946	3.74	0.00	3.74
13563.00	90.520	164.630	7910.01	5345.36	-5296.67	760.54	1877536.66	14367201.61	39°33'31.799"N	80°09'31.291"W	5350.99	171.829	1.01	-0.03	-1.01
13656.00	90.460	162.600	7909.22	5437.91	-5385.88	786.78	1877562.88	14367112.43	39°33'30.914"N	80°09'30.966"W	5443.05	171.689	2.18	-0.06	-2.18
13749.00	91.110	160.310	7907.94	5530.05	-5474.04	816.35	1877592.44	14367024.30	39°33'30.041"N	80°09'30.599"W	5534.58	171.518	2.56	0.70	-2.46
13841.00	92.220	158.980	7905.27	5620.73	-5560.26	848.34	1877624.42	14366938.11	39°33'29.186"N	80°09'30.201"W	5624.60	171.325	1.88	1.21	-1.45
13934.00	92.060	160.870	7901.80	5712.45	-5647.54	880.23	1877656.31	14366850.86	39°33'28.320"N	80°09'29.805"W	5715.73	171.141	2.04	-0.17	2.03
14027.00	92.090	160.670	7898.43	5804.38	-5735.29	910.84	1877686.91	14366763.14	39°33'27.450"N	80°09'29.424"W	5807.17	170.976	0.22	0.03	-0.22
14119.00	92.030	158.140	7895.12	5894.97	-5821.35	943.18	1877719.23	14366677.11	39°33'26.596"N	80°09'29.022"W	5897.26	170.797	2.75	-0.07	-2.75
14212.00	92.030	155.410	7891.83	5985.73	-5906.75	979.83	1877755.87	14366591.73	39°33'25.749"N	80°09'28.564"W	5987.47	170.581	2.93	0.00	-2.94
14305.00	91.970	156.570	7888.58	6076.21	-5991.65	1017.65	1877793.67	14366506.86	39°33'24.907"N	80°09'28.091"W	6077.46	170.361	1.25	-0.06	1.25
14398.00	92.060	160.000	7885.31	6167.46	-6077.99	1052.03	1877828.05	14366420.56	39°33'24.050"N	80°09'27.663"W	6168.36	170.180	3.69	0.10	3.69
14490.00	92.090	162.230	7881.98	6258.48	-6164.97	1081.79	1877857.79	14366333.60	39°33'23.188"N	80°09'27.293"W	6259.16	170.047	2.42	0.03	2.42
14583.00	91.780	164.050	7878.84	6350.90	-6253.92	1108.74	1877884.74	14366244.68	39°33'22.306"N	80°09'26.960"W	6351.44	169.947	1.98	-0.33	1.96
14676.00	91.630	159.450	7876.07	6443.05	-6342.18	1137.85	1877913.83	14366156.46	39°33'21.431"N	80°09'26.599"W	6443.44	169.829	4.95	-0.16	-4.95
14768.00	91.780	164.300	7873.33	6534.23	-6429.55	1166.45	1877942.42	14366069.12	39°33'20.565"N	80°09'26.244"W	6534.50	169.717	5.27	0.16	5.27
14861.00	90.400	160.230	7871.56	6626.52	-6518.09	1194.76	1877970.73	14365980.60	39°33'19.688"N	80°09'25.893"W	6626.69	169.613	4.62	-1.48	-4.38
14954.00	90.890	163.540	7870.51	6718.74	-6606.46	1223.68	1877999.63	14365892.26	39°33'18.812"N	80°09'25.535"W	6718.84	169.506	3.60	0.53	3.56
15047.00	90.680	169.820	7869.24	6811.59	-6696.91	1245.09	1878021.04	14365801.85	39°33'17.916"N	80°09'25.272"W	6811.67	169.468	6.76	-0.23	6.75
15103.00	90.830	171.890	7868.50	6867.56	-6752.19	1253.99	1878029.93	14365746.58	39°33'17.369"N	80°09'25.165"W	6867.64	169.479	3.71	0.27	3.70
15128.00	90.830	171.890	7868.14	6892.53	-6776.94	1257.51	1878033.46	14365721.85	39°33'17.124"N	80°09'25.123"W	6892.62	169.488	0.00	0.00	0.00





# Actual Wellpath Report

Quality Reclamation MRN 6H AWP Proj: 15128'  
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

HOLE & CASING SECTIONS - Ref Wellbore: Quality Reclamation MRN 6H AWB    Ref Wellpath: Quality Reclamation MRN 6H AWP Proj: 15128'									
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]
17.5in Open Hole	26.00	600.00	574.00	26.00	600.00	0.00	0.00	-0.17	0.73
13.375in Casing Surface	26.00	589.00	563.00	26.00	589.00	0.00	0.00	-0.20	0.77
12.25in Open Hole	600.00	3240.00	2640.00	600.00	3229.90	-0.17	0.73	43.59	-212.84
9.625in Casing Intermediate	26.00	3220.00	3194.00	26.00	3209.98	0.00	0.00	42.95	-211.26
8.75in Open Hole	3240.00	7150.00	3910.00	3229.90	7034.45	43.59	-212.84	263.45	-1070.41
8.5in Open Hole	7150.00	15128.00	7978.00	7034.45	7868.14	263.45	-1070.41	-6776.94	1257.51

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Quality Reclamation MRN 6H LP Rev-3	7785.00	-374.97	-985.54	1875791.17	14372121.65	39°34'20.599"N	80°09'53.000"W	point
Quality Reclamation MRN 6H BHL Rev-2	7871.00	-6828.72	1302.98	1878078.91	14365670.08	39°33'16.608"N	80°09'24.549"W	point

WELLPATH COMPOSITION - Ref Wellbore: Quality Reclamation MRN 6H AWB    Ref Wellpath: Quality Reclamation MRN 6H AWP Proj: 15128'				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	452.00	OWSG EMS rev2 - Standard	01 MSS <17-1/2"> (163'-452')	Quality Reclamation MRN 6H AWB
452.00	3171.00	BHI NaviTrak (Axial)	02 APS EM <12.25"> (452')(616'-3171')	Quality Reclamation MRN 6H AWB
3171.00	7074.00	BHI NaviTrak (Axial)	03 APS EM <8-3/4"> (3171')(3303'-7074')	Quality Reclamation MRN 6H AWB
7074.00	15103.00	BHI AutoTrak Curve (Short)	04 BHI AT Curve <8-1/2">(7074')(7168'-15103')	Quality Reclamation MRN 6H AWB
15103.00	15128.00	Blind Drilling (std)	Projection to bit	Quality Reclamation MRN 6H AWB



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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Slot	Slot #06
Area	Marion County, WV	Well	Quality Reclamation MRN 6H
Field	Marion	Wellbore	Quality Reclamation MRN 6H AWB
Facility	Quality Reclamation MRN Pad		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
163.00	0.050	163.810	163.00	MSS <17-1/2"> (163'-452')
616.00	0.330	298.650	616.00	APS EM <12.25"> (452')(616'-3171')
3303.00	4.890	289.940	3292.67	APS EM <8-3/4"> (3171')(3303'-7074')
7168.00	16.280	291.980	7051.75	BHI AT Curve <8-1/2">(7074')(7168'-15103')
15128.00	90.830	171.890	7868.14	Projection to Bit

COMMENTS
<p><b>Wellpath general comments</b>            API: 47-049-02421-0000            Job#: 8407781            Rig: SDC-46            Duration: 02/17/17 - 03/05/17</p>