



SWN PRODUCTION COMPANY, LLC



Location: Marshall County, WV
Field: Marshall
Facility: David Reinbeau MSH Pad

Slot: 201H
Well: David Reinbeau MSH 201H
Wellbore: David Reinbeau MSH 201H AWB

Plot reference wellpath is David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 41 (KB)	North Reference: Grid north
Reference wellpath measured depths are referenced to SDC 41 (KB)	Scale: True distance
SDC 41 (KB) to Mean Sea Level: 1276.7 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: 201H): -1250.7 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: tranlam on 2022-09-11; Database: WA_MPL_EASTERNUS_Defn

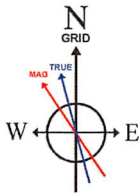
Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
David Reinbeau MSH Pad			1735218.668	14524246.412	39°59'33.6329"N	80°39'41.4703"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
201H	47.52	10.39	1735229.050	14524293.910	39°59'34.1021"N	80°39'41.3345"W
SDC 41 (KB) to Ground level (At Slot: 201H)					26ft	
Mean Sea Level to Ground level (At Slot: 201H)					-1250.7ft	
SDC 41 (KB) to Mean Sea Level					1276.7ft	

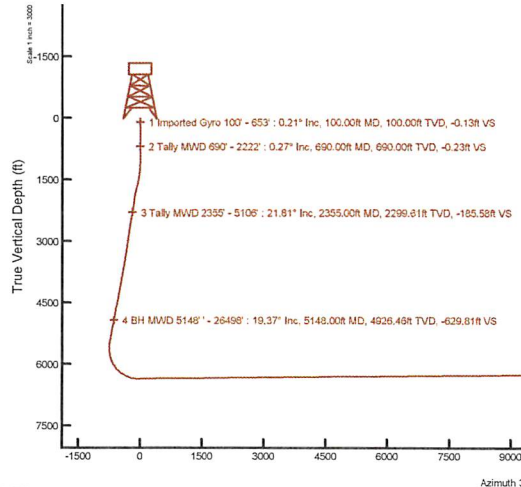
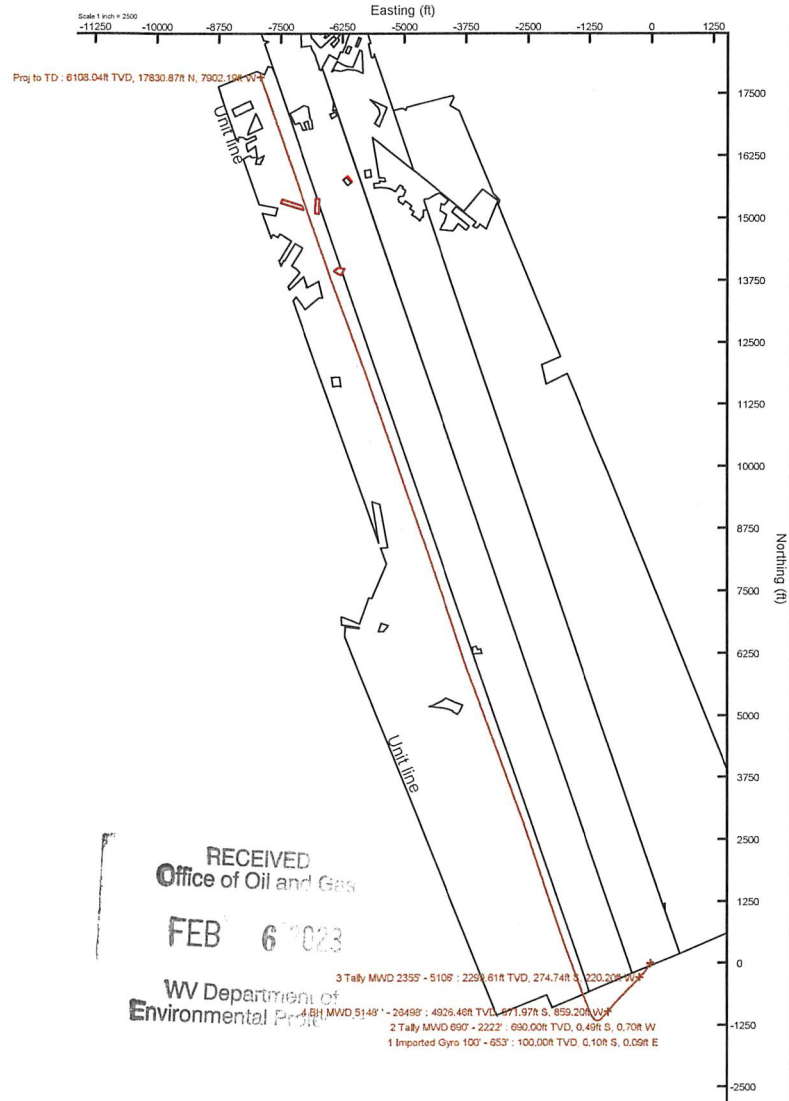
Bottom Hole Location

MD (ft)	Inc. (°)	Az. (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
26523.00	90.220	340.630	6108.04	17830.87	-7902.19	1727329.95	14542117.79	40°02'30.5953"N	80°41'22.0653"W

API:47051024400000
BH JOB: 111349245
DURATION: 09.04.2022 to 09.10.2022
RIG: SDC 41



HDM2022v1.0 (1900.0 to 2023.0) Dip: 66.86° Field: 52143.6 nT
Magnetic North is 8.14 degrees West of True North (at 8/19/2022)
Grid North is 0.22 degrees East of True North
To correct azimuth from True to Grid subtract 0.22 degrees
To correct azimuth from Magnetic to Grid subtract 8.36 degrees



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3 Tally MWD 2355' - 5105' : 2299.81ft TVD, 274.74ft S, 220.20ft W
4 BH MWD 5148' - 26498' : 4926.48ft TVD, 671.97ft S, 699.20ft W
2 Tally MWD 690' - 2222' : 690.00ft TVD, 0.49ft S, 0.70ft W
1 Imported Gyro 100' - 653' : 100.00ft TVD, 0.10ft S, 0.09ft E

03/31/2023



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Tranlam
Scale	0.999610	Report Generated	9/11/2022 at 10:22:44 PM
Convergence at slot	0.22° East	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	47.52	10.39	1735229.05	14524293.91	39°59'34.1021"N	80°39'41.3345"W
Facility Reference Pt			1735218.67	14524246.41	39°59'33.6329"N	80°39'41.4703"W
Field Reference Pt			0.00	0.00	0°00'0.0000"	85°29'19.4780"W

WELLPATH DATUM			
Calculation method	Minimum curvature	SDC 41 (KB) to Facility Vertical Datum	1276.70ft
Horizontal Reference Pt	Slot	SDC 41 (KB) to Mean Sea Level	1276.70ft
Vertical Reference Pt	SDC 41 (KB)	SDC 41 (KB) to Ground Level at Slot (201H)	26.00ft
MD Reference Pt	SDC 41 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	340.52°



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David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION

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Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
0.00†	0.000	138.590	0.00	0.00	0.00	0.00	1735229.05	14524293.91	39°59'34.1021"N	80°39'41.3345"W	0.00	0.000	0.00	
26.00	0.000	138.590	26.00	0.00	0.00	0.00	1735229.05	14524293.91	39°59'34.1021"N	80°39'41.3345"W	0.00	0.000	0.00	
100.00	0.210	138.590	100.00	-0.13	-0.10	0.09	1735229.14	14524293.81	39°59'34.1011"N	80°39'41.3334"W	0.14	138.590	0.28	1 Imported Gyro 100' - 653'
200.00	0.080	177.540	200.00	-0.36	-0.31	0.21	1735229.26	14524293.60	39°59'34.0990"N	80°39'41.3318"W	0.38	145.298	0.16	
300.00	0.090	191.930	300.00	-0.50	-0.46	0.20	1735229.25	14524293.45	39°59'34.0976"N	80°39'41.3320"W	0.50	156.224	0.02	
400.00	0.180	247.520	400.00	-0.57	-0.59	0.04	1735229.09	14524293.32	39°59'34.0962"N	80°39'41.3341"W	0.59	176.205	0.15	
500.00	0.130	293.490	500.00	-0.50	-0.61	-0.21	1735228.84	14524293.30	39°59'34.0961"N	80°39'41.3373"W	0.64	199.068	0.13	
600.00	0.150	264.510	600.00	-0.39	-0.57	-0.44	1735228.61	14524293.34	39°59'34.0964"N	80°39'41.3403"W	0.73	217.711	0.07	
653.00	0.150	297.560	653.00	-0.33	-0.55	-0.57	1735228.48	14524293.36	39°59'34.0967"N	80°39'41.3419"W	0.79	226.311	0.16	
690.00	0.270	297.300	690.00	-0.23	-0.49	-0.70	1735228.36	14524293.42	39°59'34.0973"N	80°39'41.3435"W	0.85	235.005	0.32	2 Tally MWD 690' - 2222'
780.00	0.300	280.770	780.00	0.05	-0.35	-1.12	1735227.94	14524293.56	39°59'34.0987"N	80°39'41.3489"W	1.17	252.790	0.10	
871.00	0.210	324.000	871.00	0.33	-0.17	-1.45	1735227.60	14524293.74	39°59'34.1005"N	80°39'41.3531"W	1.46	263.458	0.23	
962.00	0.940	231.970	961.99	0.25	-0.49	-2.13	1735226.92	14524293.42	39°59'34.0973"N	80°39'41.3620"W	2.19	257.040	1.07	
1054.00	2.520	215.040	1053.95	-1.17	-2.61	-3.89	1735225.16	14524291.30	39°59'34.0764"N	80°39'41.3846"W	4.68	236.114	1.79	
1144.00	4.350	220.810	1143.78	-4.01	-6.82	-7.26	1735221.80	14524287.10	39°59'34.0350"N	80°39'41.4281"W	9.95	226.792	2.07	
1236.00	6.750	218.740	1235.34	-8.58	-13.67	-12.92	1735216.13	14524280.24	39°59'33.9674"N	80°39'41.5012"W	18.81	223.376	2.62	
1328.00	9.540	216.090	1326.41	-15.74	-24.05	-20.80	1735208.26	14524269.86	39°59'33.8651"N	80°39'41.6029"W	31.80	220.845	3.06	
1420.00	12.580	213.230	1416.69	-26.13	-38.60	-30.78	1735198.28	14524255.33	39°59'33.7218"N	80°39'41.7319"W	49.37	218.570	3.36	
1512.00	15.530	212.170	1505.93	-39.84	-57.41	-42.83	1735186.24	14524236.52	39°59'33.5363"N	80°39'41.8876"W	71.63	216.725	3.22	
1604.00	18.480	209.140	1593.89	-57.12	-80.58	-56.49	1735172.58	14524213.37	39°59'33.3079"N	80°39'42.0643"W	98.41	215.034	3.35	
1695.00	21.180	208.650	1679.49	-77.63	-107.60	-71.40	1735157.68	14524186.35	39°59'33.0414"N	80°39'42.2571"W	129.14	213.566	2.97	
1787.00	22.320	212.390	1764.94	-99.52	-136.94	-88.73	1735140.36	14524157.02	39°59'32.7521"N	80°39'42.4812"W	163.17	212.940	1.95	
1878.00	21.160	218.340	1849.48	-118.94	-164.42	-108.18	1735120.92	14524129.55	39°59'32.4813"N	80°39'42.7324"W	196.82	213.341	2.74	
1970.00	19.540	223.430	1935.74	-134.79	-188.62	-129.06	1735100.04	14524105.36	39°59'32.2429"N	80°39'43.0019"W	228.55	214.380	2.61	
2062.00	17.130	228.110	2023.07	-146.96	-208.85	-149.72	1735079.39	14524085.15	39°59'32.0438"N	80°39'43.2684"W	256.97	215.637	3.07	
2153.00	17.670	227.890	2109.91	-157.39	-227.06	-169.95	1735059.17	14524066.94	39°59'31.8646"N	80°39'43.5291"W	283.61	216.814	0.60	
2222.00	19.730	226.620	2175.26	-166.13	-242.08	-186.18	1735042.94	14524051.93	39°59'31.7168"N	80°39'43.7384"W	305.39	217.564	3.04	
2355.00	21.810	225.770	2299.61	-185.58	-274.74	-220.20	1735008.93	14524019.28	39°59'31.3953"N	80°39'44.1771"W	352.09	218.713	1.58	3 Tally MWD 2355' - 5106'
2447.00	20.050	216.410	2385.56	-201.58	-299.36	-241.82	1734987.33	14523994.67	39°59'31.1528"N	80°39'44.4560"W	384.83	218.931	4.10	
2538.00	18.730	216.660	2471.40	-218.47	-323.63	-259.80	1734969.35	14523970.40	39°59'30.9136"N	80°39'44.6883"W	415.01	218.756	1.45	



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David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
2631.00	18.930	220.930	2559.42	-234.24	-347.01	-278.60	1734950.56	14523947.04	39°59'30.6833"N	80°39'44.9309"W	445.01	218.760	1.50	
2723.00	17.850	222.670	2646.73	-248.19	-368.65	-297.94	1734931.23	14523925.40	39°59'30.4701"N	80°39'45.1804"W	473.99	218.944	1.32	
2815.00	17.860	226.780	2734.30	-260.46	-388.68	-317.77	1734911.40	14523905.38	39°59'30.2729"N	80°39'45.4363"W	502.05	219.268	1.37	
2905.00	17.910	224.660	2819.95	-272.05	-407.98	-337.56	1734891.62	14523886.09	39°59'30.0830"N	80°39'45.6914"W	529.52	219.604	0.73	
2996.00	18.040	223.470	2906.51	-284.56	-428.15	-357.09	1734872.10	14523865.92	39°59'29.8843"N	80°39'45.9433"W	557.52	219.829	0.43	
3087.00	17.790	221.660	2993.10	-297.68	-448.77	-376.02	1734853.17	14523845.32	39°59'29.6813"N	80°39'46.1875"W	585.48	219.960	0.67	
3177.00	17.210	226.130	3078.93	-309.82	-468.27	-394.76	1734834.44	14523825.83	39°59'29.4893"N	80°39'46.4292"W	612.46	220.132	1.63	
3271.00	19.170	227.960	3168.23	-321.48	-488.24	-416.25	1734812.96	14523805.86	39°59'29.2927"N	80°39'46.7063"W	641.59	220.449	2.17	
3361.00	19.480	226.810	3253.16	-333.19	-508.41	-438.17	1734791.06	14523785.70	39°59'29.0943"N	80°39'46.9889"W	671.17	220.756	0.55	
3452.00	19.220	224.320	3339.02	-345.90	-529.51	-459.69	1734769.54	14523764.61	39°59'28.8865"N	80°39'47.2665"W	701.21	220.963	0.95	
3545.00	18.800	221.540	3426.95	-359.92	-551.68	-480.33	1734748.91	14523742.45	39°59'28.6682"N	80°39'47.5326"W	731.48	221.045	1.07	
3638.00	20.230	223.460	3514.61	-374.50	-574.57	-501.33	1734727.92	14523719.57	39°59'28.4428"N	80°39'47.8035"W	762.53	221.106	1.69	
3728.00	19.890	220.670	3599.15	-389.20	-597.47	-522.01	1734707.25	14523696.67	39°59'28.2172"N	80°39'48.0704"W	793.39	221.143	1.13	
3819.00	20.850	222.530	3684.46	-404.50	-621.15	-543.04	1734686.22	14523673.00	39°59'27.9840"N	80°39'48.3418"W	825.06	221.162	1.27	
3911.00	22.320	228.010	3770.02	-418.88	-644.91	-567.10	1734662.17	14523649.26	39°59'27.7502"N	80°39'48.6520"W	858.78	221.327	2.71	
4004.00	22.080	226.140	3856.12	-432.85	-668.83	-592.83	1734636.45	14523625.34	39°59'27.5147"N	80°39'48.9837"W	893.75	221.553	0.80	
4094.00	20.980	222.380	3939.85	-447.43	-692.46	-615.89	1734613.40	14523601.72	39°59'27.2821"N	80°39'49.2811"W	926.72	221.651	1.96	
4186.00	19.870	219.640	4026.06	-463.23	-716.66	-636.96	1734592.34	14523577.53	39°59'27.0436"N	80°39'49.5531"W	958.82	221.630	1.59	
4277.00	20.300	222.080	4111.53	-478.68	-740.29	-657.41	1734571.90	14523553.91	39°59'26.8109"N	80°39'49.8169"W	990.06	221.606	1.03	
4367.00	21.320	223.180	4195.66	-493.63	-763.81	-679.07	1734550.25	14523530.40	39°59'26.5793"N	80°39'50.0963"W	1022.03	221.639	1.21	
4459.00	20.550	222.330	4281.58	-508.94	-787.94	-701.39	1734527.94	14523506.28	39°59'26.3417"N	80°39'50.3842"W	1054.89	221.674	0.90	
4550.00	19.970	220.500	4366.95	-524.26	-811.57	-722.23	1734507.10	14523482.66	39°59'26.1090"N	80°39'50.6532"W	1086.40	221.667	0.94	
4641.00	21.470	220.660	4452.07	-540.33	-836.02	-743.18	1734486.16	14523458.22	39°59'25.8681"N	80°39'50.9235"W	1118.59	221.636	1.65	
4731.00	21.220	219.280	4535.89	-556.98	-861.12	-764.22	1734465.13	14523433.13	39°59'25.6208"N	80°39'51.1951"W	1151.33	221.588	0.62	
4826.00	20.540	217.090	4624.65	-575.07	-887.72	-785.16	1734444.20	14523406.54	39°59'25.3587"N	80°39'51.4654"W	1185.13	221.492	1.09	
4918.00	21.040	220.690	4710.67	-592.18	-913.12	-805.66	1734423.71	14523381.15	39°59'25.1085"N	80°39'51.7300"W	1217.73	221.422	1.49	
5012.00	20.500	223.880	4798.56	-607.96	-937.78	-828.07	1734401.30	14523356.50	39°59'24.8656"N	80°39'52.0191"W	1251.05	221.445	1.33	
5106.00	19.610	221.750	4886.86	-622.93	-961.41	-849.98	1734379.40	14523332.87	39°59'24.6329"N	80°39'52.3018"W	1283.27	221.480	1.22	
5148.00	19.370	220.480	4926.46	-629.81	-971.97	-859.20	1734370.19	14523322.32	39°59'24.5289"N	80°39'52.4207"W	1297.28	221.476	1.16	4 BH MWD 5148' - 26498'
5199.00	19.970	220.120	4974.48	-638.45	-985.06	-870.30	1734359.09	14523309.23	39°59'24.3999"N	80°39'52.5640"W	1314.45	221.461	1.20	



Actual Wellpath Report

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Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
5289.00	21.810	221.880	5058.56	-654.24	-1009.26	-891.37	1734338.03	14523285.04	39°59'24.1615"N	80°39'52.8358"W	1346.53	221.450	2.16	
5380.00	21.700	222.010	5143.08	-670.37	-1034.35	-913.91	1734315.50	14523259.96	39°59'23.9145"N	80°39'53.1266"W	1380.26	221.463	0.13	
5472.00	21.720	222.070	5228.55	-686.60	-1059.63	-936.70	1734292.71	14523234.70	39°59'23.6655"N	80°39'53.4206"W	1414.29	221.476	0.03	
5563.00	20.720	222.020	5313.38	-702.30	-1084.09	-958.76	1734270.67	14523210.25	39°59'23.4247"N	80°39'53.7052"W	1447.23	221.489	1.10	
5655.00	20.090	222.350	5399.61	-717.53	-1107.85	-980.30	1734249.13	14523186.49	39°59'23.1906"N	80°39'53.9831"W	1479.30	221.504	0.70	
5745.00	20.290	222.820	5484.08	-732.08	-1130.72	-1001.32	1734228.12	14523163.63	39°59'22.9653"N	80°39'54.2543"W	1510.36	221.527	0.29	
5837.00	17.380	239.350	5571.21	-742.17	-1149.45	-1024.00	1734205.45	14523144.91	39°59'22.7812"N	80°39'54.5466"W	1539.42	221.697	6.58	
5928.00	18.080	260.400	5657.97	-742.38	-1158.74	-1049.65	1734179.82	14523135.62	39°59'22.6903"N	80°39'54.8765"W	1563.47	222.172	7.05	
6019.00	18.220	281.620	5744.54	-732.60	-1158.23	-1077.53	1734151.94	14523136.14	39°59'22.6964"N	80°39'55.2348"W	1581.95	222.933	7.23	
6111.00	18.710	300.570	5831.88	-713.84	-1147.82	-1104.35	1734125.13	14523146.54	39°59'22.8002"N	80°39'55.5788"W	1592.82	223.894	6.52	
6201.00	25.140	314.740	5915.39	-685.51	-1126.98	-1130.40	1734099.09	14523167.37	39°59'23.0071"N	80°39'55.9125"W	1596.22	225.087	9.21	
6292.00	31.290	322.750	5995.56	-645.54	-1094.52	-1158.48	1734071.03	14523199.82	39°59'23.3289"N	80°39'56.2716"W	1593.75	226.626	7.92	
6382.00	36.260	332.200	6070.40	-596.89	-1052.32	-1185.07	1734044.44	14523242.00	39°59'23.7470"N	80°39'56.6112"W	1584.86	228.396	8.02	
6473.00	45.180	336.180	6139.31	-537.95	-998.87	-1210.71	1734018.81	14523295.43	39°59'24.2761"N	80°39'56.9381"W	1569.58	230.476	10.20	
6563.00	49.310	335.560	6200.40	-472.10	-938.58	-1237.73	1733991.80	14523355.70	39°59'24.8729"N	80°39'57.2824"W	1553.36	232.827	4.62	
6655.00	59.400	337.030	6253.95	-397.63	-870.19	-1267.69	1733961.85	14523424.06	39°59'25.5498"N	80°39'57.6640"W	1537.62	235.533	11.04	
6747.00	64.430	337.300	6297.24	-316.63	-795.41	-1299.18	1733930.38	14523498.81	39°59'26.2900"N	80°39'58.0649"W	1523.33	238.523	5.47	
6839.00	71.330	336.980	6331.87	-231.60	-716.93	-1332.27	1733897.30	14523577.26	39°59'27.0669"N	80°39'58.4863"W	1512.92	241.714	7.51	
6932.00	81.040	337.230	6354.05	-141.56	-633.83	-1367.36	1733862.22	14523660.33	39°59'27.8894"N	80°39'58.9331"W	1507.12	245.130	10.44	
7023.00	90.650	341.070	6360.63	-50.95	-549.12	-1399.60	1733829.99	14523745.00	39°59'28.7277"N	80°39'59.3433"W	1503.47	248.578	11.37	
7115.00	90.980	340.320	6359.33	41.04	-462.30	-1430.02	1733799.59	14523831.79	39°59'29.5867"N	80°39'59.7299"W	1502.89	252.085	0.89	
7207.00	91.820	340.540	6357.08	133.01	-375.64	-1460.82	1733768.80	14523918.41	39°59'30.4443"N	80°40'0.1215"W	1508.35	255.579	0.94	
7297.00	89.940	338.000	6355.70	222.97	-291.49	-1492.67	1733736.96	14524002.53	39°59'31.2771"N	80°40'0.5267"W	1520.87	258.950	3.51	
7389.00	90.650	339.450	6355.22	314.92	-205.77	-1526.05	1733703.60	14524088.23	39°59'32.1255"N	80°40'0.9514"W	1539.86	262.321	1.75	
7479.00	90.550	339.880	6354.28	404.90	-121.38	-1557.33	1733672.33	14524172.58	39°59'32.9605"N	80°40'1.3492"W	1562.05	265.543	0.49	
7568.00	89.910	339.850	6353.92	493.90	-37.82	-1587.96	1733641.71	14524256.11	39°59'33.7874"N	80°40'1.7388"W	1588.41	268.636	0.72	
7659.00	90.430	338.270	6353.65	584.86	47.17	-1620.48	1733609.20	14524341.06	39°59'34.6285"N	80°40'2.1526"W	1621.17	271.667	1.83	
7748.00	91.230	340.930	6352.36	673.83	130.57	-1651.50	1733578.20	14524424.43	39°59'35.4538"N	80°40'2.5471"W	1656.65	274.520	3.12	
7839.00	90.370	338.010	6351.09	764.80	215.77	-1683.41	1733546.30	14524509.60	39°59'36.2970"N	80°40'2.9529"W	1697.18	277.304	3.34	
7931.00	90.310	339.040	6350.55	856.74	301.38	-1717.09	1733512.64	14524595.17	39°59'37.1443"N	80°40'3.3816"W	1743.34	279.955	1.12	



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
8023.00	90.740	341.200	6349.70	948.73	387.89	-1748.37	1733481.37	14524681.65	39°59'38.0003"N	80°40'3.7793"W	1790.88	282.509	2.39	
8112.00	90.550	341.260	6348.70	1037.71	472.15	-1777.00	1733452.74	14524765.88	39°59'38.8341"N	80°40'4.1432"W	1838.66	284.880	0.22	
8202.00	90.430	341.120	6347.93	1127.71	557.34	-1806.02	1733423.74	14524851.03	39°59'39.6770"N	80°40'4.5120"W	1890.06	287.150	0.20	
8294.00	90.310	341.320	6347.34	1219.70	644.44	-1835.64	1733394.13	14524938.10	39°59'40.5388"N	80°40'4.8884"W	1945.48	289.345	0.25	
8386.00	90.460	341.300	6346.72	1311.69	731.59	-1865.12	1733364.66	14525025.21	39°59'41.4011"N	80°40'5.2630"W	2003.47	291.417	0.16	
8476.00	90.460	341.580	6346.00	1401.67	816.90	-1893.77	1733336.03	14525110.49	39°59'42.2453"N	80°40'5.6270"W	2062.45	293.334	0.31	
8568.00	90.490	341.330	6345.23	1493.66	904.12	-1923.03	1733306.78	14525197.68	39°59'43.1083"N	80°40'5.9987"W	2124.96	295.181	0.27	
8658.00	90.550	341.210	6344.42	1583.64	989.35	-1951.92	1733277.89	14525282.88	39°59'43.9516"N	80°40'6.3660"W	2188.34	296.879	0.15	
8749.00	90.340	341.230	6343.71	1674.63	1075.51	-1981.22	1733248.61	14525369.00	39°59'44.8041"N	80°40'6.7383"W	2254.32	298.495	0.23	
8841.00	90.490	341.340	6343.04	1766.62	1162.64	-2010.74	1733219.10	14525456.09	39°59'45.6662"N	80°40'7.1134"W	2322.67	300.037	0.20	
8933.00	90.710	341.350	6342.08	1858.61	1249.80	-2040.16	1733189.69	14525543.22	39°59'46.5287"N	80°40'7.4873"W	2392.54	301.492	0.24	
9024.00	90.310	341.450	6341.27	1949.59	1336.04	-2069.19	1733160.67	14525629.43	39°59'47.3820"N	80°40'7.8561"W	2463.04	302.850	0.45	
9115.00	90.550	341.440	6340.59	2040.58	1422.31	-2098.14	1733131.73	14525715.66	39°59'48.2356"N	80°40'8.2241"W	2534.79	304.133	0.26	
9207.00	90.430	341.710	6339.80	2132.56	1509.59	-2127.22	1733102.66	14525802.91	39°59'49.0992"N	80°40'8.5935"W	2608.44	305.362	0.32	
9299.00	90.340	341.340	6339.18	2224.54	1596.85	-2156.37	1733073.52	14525890.13	39°59'49.9626"N	80°40'8.9639"W	2683.26	306.521	0.41	
9390.00	90.710	341.260	6338.35	2315.53	1683.04	-2185.55	1733044.36	14525976.29	39°59'50.8154"N	80°40'9.3347"W	2758.49	307.599	0.42	
9482.00	90.800	341.620	6337.14	2407.51	1770.25	-2214.83	1733015.09	14526063.47	39°59'51.6783"N	80°40'9.7068"W	2835.36	308.634	0.40	
9574.00	91.140	341.590	6335.58	2499.48	1857.54	-2243.86	1732986.07	14526150.72	39°59'52.5419"N	80°40'10.0756"W	2912.96	309.619	0.37	
9666.00	90.860	342.000	6333.97	2591.45	1944.92	-2272.60	1732957.34	14526238.06	39°59'53.4065"N	80°40'10.4407"W	2991.22	310.557	0.54	
9759.00	91.110	341.970	6332.38	2684.40	2033.34	-2301.35	1732928.60	14526326.46	39°59'54.2814"N	80°40'10.8060"W	3070.95	311.462	0.27	
9850.00	90.740	341.770	6330.91	2775.36	2119.81	-2329.67	1732900.30	14526412.89	39°59'55.1370"N	80°40'11.1657"W	3149.76	312.300	0.46	
9941.00	90.830	341.390	6329.66	2866.34	2206.14	-2358.42	1732871.56	14526499.19	39°59'55.9912"N	80°40'11.5310"W	3229.43	313.089	0.43	
10034.00	90.710	341.510	6328.41	2959.32	2294.30	-2388.00	1732841.98	14526587.32	39°59'56.8635"N	80°40'11.9069"W	3311.55	313.854	0.18	
10126.00	90.710	341.690	6327.27	3051.30	2381.59	-2417.04	1732812.96	14526674.57	39°59'57.7272"N	80°40'12.2759"W	3393.24	314.577	0.20	
10217.00	90.060	341.740	6326.66	3142.27	2468.00	-2445.59	1732784.42	14526760.94	39°59'58.5821"N	80°40'12.6386"W	3474.47	315.261	0.72	
10308.00	90.030	339.040	6326.59	3233.26	2553.71	-2476.13	1732753.89	14526846.62	39°59'59.4302"N	80°40'13.0270"W	3557.06	315.884	2.97	
10400.00	90.830	342.440	6325.90	3325.25	2640.55	-2506.47	1732723.56	14526933.42	40°00'0.2895"N	80°40'13.4127"W	3640.72	316.492	3.80	
10490.00	90.250	341.990	6325.05	3415.20	2726.24	-2533.96	1732696.09	14527019.08	40°00'1.1373"N	80°40'13.7619"W	3722.01	317.093	0.82	
10581.00	90.490	340.560	6324.46	3506.19	2812.42	-2563.17	1732666.89	14527105.23	40°00'1.9900"N	80°40'14.1331"W	3805.20	317.655	1.59	
10674.00	90.680	339.720	6323.51	3599.18	2899.88	-2594.76	1732635.31	14527192.66	40°00'2.8555"N	80°40'14.5349"W	3891.29	318.178	0.93	



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
10765.00	90.680	339.470	6322.43	3690.16	2985.17	-2626.49	1732603.59	14527277.91	40°00'3.6995"N	80°40'14.9385"W	3976.14	318.657	0.27	
10857.00	90.580	339.680	6321.42	3782.15	3071.38	-2658.59	1732571.50	14527364.08	40°00'4.5526"N	80°40'15.3470"W	4062.20	319.120	0.25	
10949.00	90.400	339.780	6320.63	3874.13	3157.68	-2690.46	1732539.64	14527450.35	40°00'5.4066"N	80°40'15.7524"W	4148.43	319.568	0.22	
11040.00	90.490	339.780	6319.93	3965.12	3243.07	-2721.91	1732508.20	14527535.71	40°00'6.2516"N	80°40'16.1525"W	4233.95	319.993	0.10	
11133.00	90.980	339.230	6318.73	4058.10	3330.17	-2754.47	1732475.66	14527622.78	40°00'7.1136"N	80°40'16.5668"W	4321.71	320.405	0.79	
11225.00	90.710	340.100	6317.38	4150.08	3416.43	-2786.44	1732443.70	14527709.00	40°00'7.9672"N	80°40'16.9735"W	4408.65	320.799	0.99	
11317.00	90.620	339.850	6316.31	4242.07	3502.86	-2817.94	1732412.21	14527795.40	40°00'8.8224"N	80°40'17.3742"W	4495.64	321.184	0.29	
11410.00	91.350	339.790	6314.71	4335.05	3590.14	-2850.02	1732380.15	14527882.64	40°00'9.6861"N	80°40'17.7822"W	4583.85	321.556	0.79	
11503.00	90.460	340.000	6313.24	4428.03	3677.46	-2881.98	1732348.20	14527969.93	40°00'10.5502"N	80°40'18.1888"W	4672.21	321.915	0.98	
11594.00	90.710	340.560	6312.31	4519.02	3763.12	-2912.69	1732317.51	14528055.55	40°00'11.3978"N	80°40'18.5793"W	4758.65	322.260	0.67	
11685.00	91.260	340.410	6310.75	4610.01	3848.88	-2943.08	1732287.12	14528141.28	40°00'12.2464"N	80°40'18.9658"W	4845.16	322.596	0.63	
11777.00	90.650	339.880	6309.21	4701.99	3935.39	-2974.32	1732255.89	14528227.76	40°00'13.1026"N	80°40'19.3632"W	4932.94	322.918	0.88	
11868.00	90.460	340.030	6308.33	4792.99	4020.88	-3005.51	1732224.72	14528313.21	40°00'13.9485"N	80°40'19.7600"W	5020.02	323.223	0.27	
11958.00	91.230	340.940	6307.00	4882.97	4105.70	-3035.57	1732194.67	14528398.00	40°00'14.7878"N	80°40'20.1422"W	5106.02	323.522	1.32	
12049.00	90.710	339.640	6305.46	4973.96	4191.35	-3066.26	1732163.99	14528483.62	40°00'15.6353"N	80°40'20.5325"W	5193.20	323.812	1.54	
12142.00	90.580	338.840	6304.42	5066.93	4278.31	-3099.22	1732131.04	14528570.54	40°00'16.4958"N	80°40'20.9520"W	5282.90	324.080	0.87	
12233.00	90.280	339.690	6303.73	5157.90	4363.41	-3131.44	1732098.84	14528655.61	40°00'17.3380"N	80°40'21.3620"W	5370.78	324.335	0.99	
12324.00	90.430	340.000	6303.17	5248.90	4448.84	-3162.79	1732067.50	14528741.00	40°00'18.1833"N	80°40'21.7609"W	5458.51	324.590	0.38	
12414.00	90.430	340.230	6302.49	5338.89	4533.47	-3193.40	1732036.90	14528825.60	40°00'19.0208"N	80°40'22.1502"W	5545.28	324.839	0.26	
12506.00	90.150	339.970	6302.03	5430.89	4619.97	-3224.72	1732005.60	14528912.07	40°00'19.8768"N	80°40'22.5486"W	5634.09	325.085	0.42	
12598.00	90.370	339.920	6301.61	5522.88	4706.39	-3256.27	1731974.06	14528998.46	40°00'20.7320"N	80°40'22.9499"W	5723.06	325.321	0.25	
12690.00	90.180	340.080	6301.17	5614.88	4792.84	-3287.73	1731942.61	14529084.88	40°00'21.5875"N	80°40'23.3502"W	5812.10	325.551	0.27	
12781.00	90.220	339.570	6300.85	5705.87	4878.26	-3319.12	1731911.23	14529170.26	40°00'22.4327"N	80°40'23.7495"W	5900.33	325.769	0.56	
12873.00	90.710	339.880	6300.11	5797.86	4964.56	-3350.99	1731879.37	14529256.52	40°00'23.2866"N	80°40'24.1551"W	5989.66	325.981	0.63	
12965.00	90.520	339.870	6299.12	5889.85	5050.93	-3382.65	1731847.73	14529342.86	40°00'24.1414"N	80°40'24.5578"W	6079.00	326.189	0.21	
13057.00	90.520	339.750	6298.28	5981.83	5137.28	-3414.40	1731815.99	14529429.17	40°00'24.9958"N	80°40'24.9617"W	6168.45	326.391	0.13	
13149.00	91.230	339.490	6296.88	6073.81	5223.51	-3446.43	1731783.97	14529515.37	40°00'25.8491"N	80°40'25.3693"W	6258.03	326.583	0.82	
13241.00	91.050	339.700	6295.05	6165.78	5309.72	-3478.50	1731751.91	14529601.55	40°00'26.7022"N	80°40'25.7774"W	6347.68	326.770	0.30	
13334.00	90.830	340.100	6293.52	6258.76	5397.04	-3510.46	1731719.97	14529688.84	40°00'27.5663"N	80°40'26.1840"W	6438.27	326.958	0.49	
13426.00	90.860	339.180	6292.17	6350.74	5483.28	-3542.46	1731687.97	14529775.04	40°00'28.4198"N	80°40'26.5912"W	6528.05	327.136	1.00	



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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13517.00	90.920	339.420	6290.75	6441.71	5568.40	-3574.63	1731655.82	14529860.13	40°00'29.2621"N	80°40'27.0005"W	6617.02	327.302	0.27		
13608.00	90.920	339.780	6289.29	6532.69	5653.68	-3606.34	1731624.12	14529945.37	40°00'30.1060"N	80°40'27.4041"W	6705.95	327.467	0.40		
13701.00	89.510	339.470	6288.94	6625.67	5740.86	-3638.72	1731591.76	14530032.52	40°00'30.9687"N	80°40'27.8161"W	6796.89	327.632	1.55		
13794.00	90.680	339.070	6288.79	6718.65	5827.83	-3671.64	1731558.85	14530119.46	40°00'31.8294"N	80°40'28.2351"W	6888.00	327.788	1.33		
13886.00	90.860	339.380	6287.55	6810.62	5913.85	-3704.27	1731526.23	14530205.44	40°00'32.6805"N	80°40'28.6504"W	6978.19	327.938	0.39		
13977.00	89.970	341.300	6286.89	6901.61	5999.53	-3734.88	1731495.63	14530291.09	40°00'33.5284"N	80°40'29.0398"W	7067.09	328.097	2.33		
14070.00	90.370	338.810	6286.62	6994.60	6086.95	-3766.60	1731463.92	14530378.47	40°00'34.3934"N	80°40'29.4433"W	7158.09	328.251	2.71		
14162.00	90.370	342.810	6286.02	7086.57	6173.82	-3796.83	1731433.70	14530465.31	40°00'35.2530"N	80°40'29.8278"W	7247.89	328.409	4.35		
14254.00	90.220	341.420	6285.55	7178.54	6261.37	-3825.09	1731405.46	14530552.82	40°00'36.1192"N	80°40'30.1868"W	7337.30	328.579	1.52		
14347.00	90.340	341.590	6285.09	7271.52	6349.56	-3854.59	1731375.97	14530640.99	40°00'36.9918"N	80°40'30.5618"W	7427.97	328.740	0.22		
14443.00	90.430	341.850	6284.45	7367.50	6440.72	-3884.70	1731345.87	14530732.10	40°00'37.8937"N	80°40'30.9445"W	7521.55	328.904	0.29		
14538.00	90.460	341.970	6283.71	7462.47	6531.02	-3914.20	1731316.39	14530822.37	40°00'38.7872"N	80°40'31.3193"W	7614.14	329.065	0.13		
14632.00	90.860	341.700	6282.63	7556.44	6620.33	-3943.50	1731287.09	14530911.64	40°00'39.6708"N	80°40'31.6917"W	7705.84	329.219	0.51		
14726.00	90.950	341.740	6281.14	7650.40	6709.57	-3972.98	1731257.63	14531000.85	40°00'40.5538"N	80°40'32.0664"W	7797.62	329.369	0.10		
14821.00	90.490	341.440	6279.95	7745.38	6799.70	-4002.98	1731227.64	14531090.95	40°00'41.4456"N	80°40'32.4478"W	7890.49	329.515	0.58		
14915.00	90.740	341.220	6278.94	7839.36	6888.75	-4033.07	1731197.56	14531179.96	40°00'42.3266"N	80°40'32.8303"W	7982.51	329.653	0.35		
15010.00	90.120	340.730	6278.23	7934.36	6978.56	-4064.04	1731166.60	14531269.73	40°00'43.2152"N	80°40'33.2241"W	8075.68	329.785	0.83		
15105.00	90.800	341.410	6277.47	8029.35	7068.42	-4094.85	1731135.80	14531359.56	40°00'44.1044"N	80°40'33.6160"W	8168.86	329.916	1.01		
15199.00	90.710	341.060	6276.23	8123.33	7157.41	-4125.09	1731105.58	14531448.52	40°00'44.9849"N	80°40'34.0004"W	8261.05	330.044	0.38		
15293.00	90.620	341.090	6275.14	8217.32	7246.32	-4155.58	1731075.10	14531537.40	40°00'45.8647"N	80°40'34.3880"W	8353.32	330.167	0.10		
15387.00	90.400	342.000	6274.30	8311.30	7335.49	-4185.33	1731045.36	14531626.52	40°00'46.7468"N	80°40'34.7663"W	8445.49	330.293	1.00		
15481.00	90.710	339.730	6273.39	8405.29	7424.28	-4216.14	1731014.56	14531715.28	40°00'47.6255"N	80°40'35.1581"W	8537.90	330.408	2.44		
15576.00	90.460	340.140	6272.42	8500.28	7513.51	-4248.73	1730981.98	14531804.48	40°00'48.5084"N	80°40'35.5728"W	8631.60	330.513	0.51		
15671.00	90.430	341.490	6271.68	8595.27	7603.23	-4279.95	1730950.78	14531894.16	40°00'49.3962"N	80°40'35.9698"W	8725.08	330.624	1.42		
15765.00	90.550	341.190	6270.88	8689.26	7692.29	-4310.02	1730920.72	14531983.18	40°00'50.2773"N	80°40'36.3522"W	8817.46	330.738	0.34		
15859.00	90.770	341.220	6269.79	8783.25	7781.27	-4340.31	1730890.44	14532072.13	40°00'51.1577"N	80°40'36.7372"W	8909.90	330.848	0.24		
15954.00	90.400	340.940	6268.82	8878.24	7871.13	-4371.11	1730859.65	14532161.96	40°00'52.0469"N	80°40'37.1289"W	9003.40	330.955	0.49		
16049.00	90.520	340.130	6268.06	8973.23	7960.70	-4402.76	1730828.01	14532251.49	40°00'52.9331"N	80°40'37.5316"W	9097.09	331.055	0.86		
16143.00	91.290	340.970	6266.58	9067.22	8049.32	-4434.06	1730796.73	14532340.08	40°00'53.8100"N	80°40'37.9297"W	9189.80	331.151	1.21		
16237.00	90.310	340.560	6265.26	9161.21	8138.06	-4465.02	1730765.78	14532428.78	40°00'54.6881"N	80°40'38.3235"W	9282.48	331.248	1.13		

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
16332.00	90.370	341.230	6264.70	9256.20	8227.83	-4496.12	1730734.69	14532518.51	40°00'55.5763"N	80°40'38.7190"W	9376.15	331.345	0.71	
16427.00	90.030	340.990	6264.37	9351.20	8317.71	-4526.87	1730703.95	14532608.36	40°00'56.4657"N	80°40'39.1101"W	9469.79	331.443	0.44	
16521.00	90.460	341.050	6263.97	9445.19	8406.60	-4557.45	1730673.39	14532697.22	40°00'57.3452"N	80°40'39.4989"W	9562.49	331.537	0.46	
16616.00	90.580	340.420	6263.10	9540.19	8496.27	-4588.79	1730642.06	14532786.86	40°00'58.2325"N	80°40'39.8976"W	9656.28	331.627	0.68	
16710.00	90.370	340.200	6262.32	9634.19	8584.77	-4620.46	1730610.40	14532875.32	40°00'59.1082"N	80°40'40.3005"W	9749.20	331.710	0.32	
16805.00	90.310	340.870	6261.76	9729.18	8674.34	-4652.11	1730578.76	14532964.86	40°00'59.9945"N	80°40'40.7032"W	9843.09	331.795	0.71	
16899.00	90.060	340.090	6261.46	9823.18	8762.94	-4683.52	1730547.36	14533053.42	40°01'0.8711"N	80°40'41.1028"W	9936.02	331.877	0.87	
16994.00	90.250	341.350	6261.20	9918.18	8852.61	-4714.89	1730516.01	14533143.05	40°01'1.7584"N	80°40'41.5017"W	10029.90	331.960	1.34	
17088.00	90.250	340.380	6260.79	10012.17	8941.41	-4745.70	1730485.21	14533231.82	40°01'2.6371"N	80°40'41.8936"W	10122.77	332.043	1.03	
17182.00	90.060	340.560	6260.54	10106.17	9030.01	-4777.13	1730453.80	14533320.38	40°01'3.5137"N	80°40'42.2934"W	10215.77	332.120	0.28	
17277.00	90.460	340.470	6260.11	10201.17	9119.56	-4808.81	1730422.12	14533409.90	40°01'4.3998"N	80°40'42.6966"W	10309.76	332.197	0.43	
17371.00	90.310	340.850	6259.47	10295.17	9208.26	-4839.94	1730391.00	14533498.56	40°01'5.2774"N	80°40'43.0925"W	10402.74	332.273	0.43	
17465.00	90.460	340.670	6258.84	10389.17	9297.00	-4870.92	1730360.04	14533587.27	40°01'6.1556"N	80°40'43.4866"W	10495.72	332.349	0.25	
17560.00	89.880	340.630	6258.56	10484.17	9386.64	-4902.39	1730328.58	14533676.87	40°01'7.0425"N	80°40'43.8870"W	10589.73	332.423	0.61	
17654.00	90.150	340.880	6258.54	10578.17	9475.38	-4933.38	1730297.60	14533765.58	40°01'7.9206"N	80°40'44.2811"W	10682.75	332.496	0.39	
17748.00	90.340	340.810	6258.13	10672.16	9564.18	-4964.22	1730266.77	14533854.34	40°01'8.7992"N	80°40'44.6734"W	10775.76	332.569	0.22	
17842.00	90.580	340.810	6257.38	10766.16	9652.95	-4995.12	1730235.89	14533943.08	40°01'9.6776"N	80°40'45.0664"W	10868.79	332.640	0.26	
17937.00	90.550	341.800	6256.44	10861.14	9742.93	-5025.57	1730205.45	14534033.03	40°01'10.5679"N	80°40'45.4536"W	10962.71	332.715	1.04	
18031.00	90.830	341.280	6255.31	10955.12	9832.09	-5055.33	1730175.70	14534122.15	40°01'11.4500"N	80°40'45.8320"W	11055.60	332.789	0.63	
18125.00	91.290	341.190	6253.57	11049.10	9921.08	-5085.56	1730145.48	14534211.10	40°01'12.3305"N	80°40'46.2165"W	11148.58	332.860	0.50	
18220.00	91.390	340.500	6251.35	11144.07	10010.79	-5116.73	1730114.33	14534300.78	40°01'13.2182"N	80°40'46.6129"W	11242.64	332.927	0.73	
18314.00	90.740	341.130	6249.60	11238.05	10099.56	-5147.61	1730083.46	14534389.51	40°01'14.0964"N	80°40'47.0058"W	11335.74	332.993	0.96	
18409.00	91.050	340.720	6248.12	11333.04	10189.33	-5178.65	1730052.43	14534479.25	40°01'14.9847"N	80°40'47.4007"W	11429.82	333.058	0.54	
18503.00	90.920	340.550	6246.50	11427.02	10278.00	-5209.82	1730021.27	14534567.88	40°01'15.8620"N	80°40'47.7971"W	11523.00	333.120	0.23	
18598.00	91.260	341.030	6244.70	11522.00	10367.69	-5241.07	1729990.03	14534657.54	40°01'16.7495"N	80°40'48.1947"W	11617.14	333.183	0.62	
18692.00	91.200	341.110	6242.68	11615.98	10456.59	-5271.56	1729959.56	14534746.40	40°01'17.6291"N	80°40'48.5825"W	11710.23	333.246	0.11	
18787.00	91.020	340.870	6240.84	11710.96	10546.39	-5302.50	1729928.63	14534836.17	40°01'18.5176"N	80°40'48.9760"W	11804.36	333.308	0.32	
18882.00	90.710	340.090	6239.40	11805.95	10635.92	-5334.23	1729896.91	14534925.66	40°01'19.4035"N	80°40'49.3798"W	11898.61	333.365	0.88	
18976.00	91.200	340.770	6237.84	11899.93	10724.48	-5365.72	1729865.44	14535014.18	40°01'20.2798"N	80°40'49.7804"W	11991.88	333.420	0.89	
19070.00	90.950	340.720	6236.07	11993.91	10813.20	-5396.71	1729834.45	14535102.88	40°01'21.1577"N	80°40'50.1747"W	12085.11	333.477	0.27	



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
19164.00	91.080	340.870	6234.41	12087.90	10901.96	-5427.63	1729803.55	14535191.60	40°01'22.0359"N	80°40'50.5680"W	12178.33	333.533	0.21	
19259.00	90.710	340.160	6232.92	12182.89	10991.50	-5459.31	1729771.88	14535281.11	40°01'22.9219"N	80°40'50.9711"W	12272.62	333.587	0.84	
19353.00	90.950	340.630	6231.56	12276.88	11080.05	-5490.85	1729740.35	14535369.61	40°01'23.7980"N	80°40'51.3724"W	12365.95	333.639	0.56	
19448.00	90.980	340.420	6229.96	12371.86	11169.60	-5522.51	1729708.70	14535459.13	40°01'24.6841"N	80°40'51.7754"W	12460.26	333.691	0.22	
19542.00	90.950	340.410	6228.38	12465.85	11258.15	-5554.02	1729677.21	14535547.65	40°01'25.5603"N	80°40'52.1763"W	12553.60	333.741	0.03	
19636.00	91.020	340.530	6226.76	12559.83	11346.72	-5585.44	1729645.80	14535636.19	40°01'26.4367"N	80°40'52.5761"W	12646.95	333.791	0.15	
19730.00	91.320	340.680	6224.84	12653.82	11435.37	-5616.65	1729614.60	14535724.80	40°01'27.3139"N	80°40'52.9731"W	12740.27	333.841	0.36	
19824.00	91.140	341.170	6222.83	12747.79	11524.19	-5647.36	1729583.90	14535813.59	40°01'28.1927"N	80°40'53.3638"W	12833.54	333.893	0.56	
19919.00	90.710	340.840	6221.29	12842.77	11614.00	-5678.28	1729553.00	14535903.37	40°01'29.0813"N	80°40'53.7571"W	12927.80	333.945	0.57	
20013.00	91.020	340.890	6219.87	12936.76	11702.80	-5709.09	1729522.20	14535992.13	40°01'29.9599"N	80°40'54.1491"W	13021.11	333.995	0.33	
20107.00	90.710	340.730	6218.45	13030.75	11791.57	-5739.98	1729491.32	14536080.86	40°01'30.8382"N	80°40'54.5421"W	13114.44	334.044	0.37	
20202.00	90.800	340.240	6217.20	13125.74	11881.10	-5771.71	1729459.60	14536170.36	40°01'31.7242"N	80°40'54.9459"W	13208.83	334.090	0.52	
20297.00	90.770	340.920	6215.90	13220.73	11970.69	-5803.30	1729428.03	14536259.91	40°01'32.6106"N	80°40'55.3478"W	13303.22	334.136	0.72	
20391.00	90.650	339.510	6214.74	13314.72	12059.13	-5835.11	1729396.22	14536348.32	40°01'33.4857"N	80°40'55.7527"W	13396.68	334.179	1.51	
20486.00	90.830	339.900	6213.51	13409.70	12148.22	-5868.06	1729363.29	14536437.38	40°01'34.3673"N	80°40'56.1721"W	13491.24	334.218	0.45	
20581.00	90.990	339.430	6212.00	13504.68	12237.29	-5901.07	1729330.29	14536526.41	40°01'35.2487"N	80°40'56.5924"W	13585.80	334.256	0.52	
20675.00	91.080	339.900	6210.30	13598.65	12325.42	-5933.73	1729297.65	14536614.50	40°01'36.1207"N	80°40'57.0082"W	13679.37	334.293	0.51	
20770.00	91.350	339.620	6208.29	13693.62	12414.53	-5966.59	1729264.80	14536703.58	40°01'37.0025"N	80°40'57.4265"W	13773.92	334.330	0.41	
20864.00	91.320	339.890	6206.10	13787.59	12502.70	-5999.11	1729232.29	14536791.71	40°01'37.8750"N	80°40'57.8404"W	13867.47	334.367	0.29	
20959.00	91.200	339.460	6204.01	13882.56	12591.77	-6032.10	1729199.32	14536880.74	40°01'38.7563"N	80°40'58.2604"W	13962.05	334.403	0.47	
21054.00	91.320	339.590	6201.92	13977.52	12680.74	-6065.32	1729166.11	14536969.69	40°01'39.6367"N	80°40'58.6834"W	14056.65	334.438	0.19	
21148.00	91.600	340.000	6199.52	14071.48	12768.93	-6097.77	1729133.67	14537057.84	40°01'40.5093"N	80°40'59.0966"W	14150.21	334.473	0.53	
21243.00	91.290	339.970	6197.13	14166.45	12858.16	-6130.28	1729101.17	14537147.04	40°01'41.3923"N	80°40'59.5104"W	14244.74	334.510	0.33	
21338.00	91.660	339.440	6194.68	14261.41	12947.23	-6163.22	1729068.25	14537236.07	40°01'42.2737"N	80°40'59.9297"W	14339.32	334.544	0.68	
21432.00	91.170	339.530	6192.36	14355.36	13035.25	-6196.15	1729035.33	14537324.05	40°01'43.1446"N	80°41'0.3491"W	14432.95	334.576	0.53	
21527.00	91.450	339.650	6190.19	14450.32	13124.26	-6229.27	1729002.22	14537413.03	40°01'44.0254"N	80°41'0.7708"W	14527.56	334.609	0.32	
21621.00	91.230	339.580	6187.99	14544.29	13212.35	-6262.01	1728969.50	14537501.08	40°01'44.8971"N	80°41'1.1875"W	14621.18	334.641	0.25	
21716.00	91.540	339.840	6185.70	14639.25	13301.43	-6294.94	1728936.58	14537590.13	40°01'45.7785"N	80°41'1.6068"W	14715.78	334.674	0.43	
21810.00	91.350	339.520	6183.33	14733.21	13389.55	-6327.57	1728903.96	14537678.21	40°01'46.6505"N	80°41'2.0223"W	14809.40	334.706	0.40	
21905.00	90.920	339.170	6181.44	14828.17	13478.42	-6361.07	1728870.47	14537767.06	40°01'47.5300"N	80°41'2.4490"W	14904.07	334.735	0.58	



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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Slot	201H		

WELLPATH DATA (290 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]	Comments
21999.00	91.050	339.700	6179.83	14922.14	13566.42	-6394.09	1728837.47	14537855.02	40°01'48.4007"N	80°41'2.8693"W	14997.74	334.765	0.58	
22094.00	90.980	338.930	6178.15	15017.10	13655.28	-6427.64	1728803.93	14537943.84	40°01'49.2801"N	80°41'3.2966"W	15092.43	334.793	0.81	
22188.00	91.260	339.490	6176.31	15111.06	13743.14	-6461.00	1728770.58	14538031.67	40°01'50.1495"N	80°41'3.7214"W	15186.13	334.821	0.67	
22282.00	91.050	340.230	6174.41	15205.03	13831.38	-6493.36	1728738.24	14538119.87	40°01'51.0226"N	80°41'4.1334"W	15279.75	334.852	0.82	
22376.00	91.140	340.580	6172.62	15299.02	13919.92	-6524.88	1728706.73	14538208.38	40°01'51.8987"N	80°41'4.5346"W	15373.29	334.885	0.38	
22471.00	91.320	340.680	6170.58	15393.99	14009.52	-6556.38	1728675.24	14538297.94	40°01'52.7852"N	80°41'4.9354"W	15467.80	334.921	0.22	
22566.00	91.420	341.050	6168.31	15488.96	14099.25	-6587.51	1728644.12	14538387.63	40°01'53.6730"N	80°41'5.3316"W	15562.26	334.957	0.40	
22660.00	91.200	340.600	6166.16	15582.94	14188.01	-6618.38	1728613.27	14538476.36	40°01'54.5512"N	80°41'5.7243"W	15655.75	334.992	0.53	
22754.00	91.080	340.870	6164.29	15676.92	14276.73	-6649.38	1728582.27	14538565.04	40°01'55.4291"N	80°41'6.1189"W	15749.26	335.026	0.31	
22848.00	91.260	340.170	6162.37	15770.90	14365.33	-6680.72	1728550.94	14538653.61	40°01'56.3057"N	80°41'6.5178"W	15842.81	335.059	0.77	
22943.00	91.170	340.620	6160.35	15865.88	14454.80	-6712.59	1728519.09	14538743.05	40°01'57.1910"N	80°41'6.9234"W	15937.38	335.091	0.48	
23037.00	91.260	340.220	6158.36	15959.85	14543.34	-6744.09	1728487.60	14538831.56	40°01'58.0671"N	80°41'7.3243"W	16030.95	335.122	0.44	
23132.00	91.140	340.470	6156.37	16054.83	14632.79	-6776.03	1728455.67	14538920.97	40°01'58.9522"N	80°41'7.7309"W	16125.54	335.152	0.29	
23227.00	91.170	340.190	6154.46	16149.81	14722.23	-6808.00	1728423.71	14539010.37	40°01'59.8371"N	80°41'8.1379"W	16220.14	335.183	0.30	
23321.00	91.320	340.220	6152.41	16243.79	14810.65	-6839.83	1728391.90	14539098.76	40°02'0.7121"N	80°41'8.5430"W	16313.76	335.212	0.16	
23415.00	91.200	340.480	6150.35	16337.77	14899.15	-6871.43	1728360.31	14539187.23	40°02'1.5878"N	80°41'8.9453"W	16407.36	335.241	0.30	
23510.00	91.260	340.310	6148.31	16432.74	14988.63	-6903.30	1728328.45	14539276.67	40°02'2.4731"N	80°41'9.3509"W	16501.95	335.271	0.19	
23605.00	91.140	340.540	6146.32	16527.72	15078.12	-6935.12	1728296.64	14539366.12	40°02'3.3586"N	80°41'9.7560"W	16596.55	335.300	0.27	
23699.00	91.140	340.750	6144.45	16621.70	15166.79	-6966.27	1728265.51	14539454.76	40°02'4.2359"N	80°41'10.1524"W	16690.13	335.330	0.22	
23794.00	91.050	340.990	6142.63	16716.69	15256.52	-6997.40	1728234.39	14539544.46	40°02'5.1238"N	80°41'10.5485"W	16784.67	335.361	0.27	
23886.00	91.320	340.660	6140.73	16808.66	15343.40	-7027.61	1728204.19	14539631.30	40°02'5.9834"N	80°41'10.9329"W	16876.23	335.391	0.46	
23981.00	91.320	340.830	6138.54	16903.64	15433.06	-7058.93	1728172.89	14539720.93	40°02'6.8705"N	80°41'11.3315"W	16970.80	335.421	0.18	
24075.00	91.080	340.670	6136.57	16997.62	15521.79	-7089.91	1728141.91	14539809.62	40°02'7.7484"N	80°41'11.7259"W	17064.37	335.450	0.31	
24169.00	90.860	341.070	6134.98	17091.60	15610.58	-7120.71	1728111.13	14539898.38	40°02'8.6270"N	80°41'12.1178"W	17157.94	335.480	0.49	
24264.00	90.980	340.450	6133.46	17186.59	15700.27	-7152.01	1728079.84	14539988.03	40°02'9.5143"N	80°41'12.5162"W	17252.53	335.509	0.66	
24358.00	90.950	340.760	6131.87	17280.57	15788.92	-7183.22	1728048.64	14540076.64	40°02'10.3915"N	80°41'12.9134"W	17346.14	335.537	0.33	
24452.00	91.020	340.670	6130.26	17374.56	15877.63	-7214.27	1728017.61	14540165.32	40°02'11.2692"N	80°41'13.3085"W	17439.75	335.565	0.12	
24547.00	90.800	340.390	6128.75	17469.55	15967.19	-7245.93	1727985.96	14540254.84	40°02'12.1553"N	80°41'13.7115"W	17534.38	335.591	0.37	
24642.00	90.860	340.450	6127.37	17564.54	16056.68	-7277.76	1727954.14	14540344.30	40°02'13.0409"N	80°41'14.1167"W	17629.03	335.617	0.09	
24736.00	90.680	341.000	6126.11	17658.53	16145.41	-7308.79	1727923.13	14540432.99	40°02'13.9187"N	80°41'14.5116"W	17722.65	335.644	0.62	

REFERENCE WELLPATH IDENTIFICATION

Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

WELLPATH DATA (290 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]	Comments
24831.00	90.580	340.480	6125.06	17753.52	16235.08	-7340.12	1727891.81	14540522.63	40°02'14.8060"N	80°41'14.9104"W	17817.28	335.672	0.56	
24925.00	90.340	340.390	6124.31	17847.52	16323.65	-7371.60	1727860.34	14540611.17	40°02'15.6824"N	80°41'15.3111"W	17910.95	335.697	0.27	
25019.00	90.520	340.860	6123.60	17941.51	16412.33	-7402.78	1727829.17	14540699.81	40°02'16.5598"N	80°41'15.7080"W	18004.60	335.722	0.54	
25114.00	91.050	340.520	6122.30	18036.50	16501.97	-7434.19	1727797.77	14540789.42	40°02'17.4468"N	80°41'16.1078"W	18099.24	335.748	0.66	
25208.00	91.480	340.360	6120.23	18130.48	16590.53	-7465.66	1727766.32	14540877.94	40°02'18.3229"N	80°41'16.5084"W	18192.90	335.772	0.49	
25302.00	91.320	340.810	6117.93	18224.45	16679.16	-7496.89	1727735.09	14540966.53	40°02'19.1999"N	80°41'16.9060"W	18286.54	335.797	0.51	
25397.00	90.550	340.750	6116.38	18319.44	16768.85	-7528.16	1727703.84	14541056.19	40°02'20.0873"N	80°41'17.3040"W	18381.17	335.823	0.81	
25491.00	90.740	340.710	6115.32	18413.43	16857.58	-7559.18	1727672.83	14541144.88	40°02'20.9652"N	80°41'17.6988"W	18474.82	335.848	0.21	
25586.00	90.770	340.570	6114.07	18508.42	16947.20	-7590.67	1727641.35	14541234.47	40°02'21.8519"N	80°41'18.0996"W	18569.48	335.872	0.15	
25680.00	90.550	340.590	6112.99	18602.42	17035.84	-7621.92	1727610.11	14541323.08	40°02'22.7290"N	80°41'18.4974"W	18663.16	335.896	0.24	
25775.00	90.250	340.260	6112.32	18697.41	17125.35	-7653.75	1727578.30	14541412.55	40°02'23.6147"N	80°41'18.9026"W	18757.86	335.919	0.47	
25870.00	90.460	340.580	6111.74	18792.41	17214.85	-7685.59	1727546.47	14541502.22	40°02'24.5003"N	80°41'19.3079"W	18852.57	335.942	0.40	
25964.00	90.250	340.480	6111.15	18886.41	17303.48	-7716.92	1727515.15	14541590.61	40°02'25.3771"N	80°41'19.7068"W	18946.27	335.964	0.25	
26059.00	90.280	340.800	6110.71	18981.41	17393.10	-7748.41	1727483.67	14541680.20	40°02'26.2639"N	80°41'20.1076"W	19040.95	335.988	0.34	
26153.00	90.340	340.410	6110.20	19075.41	17481.77	-7779.63	1727452.47	14541768.83	40°02'27.1412"N	80°41'20.5050"W	19134.65	336.010	0.42	
26247.00	90.490	340.790	6109.52	19169.41	17570.43	-7810.85	1727421.26	14541857.46	40°02'28.0185"N	80°41'20.9024"W	19228.35	336.033	0.43	
26342.00	90.220	340.400	6108.94	19264.40	17660.03	-7842.41	1727389.71	14541947.02	40°02'28.9050"N	80°41'21.3042"W	19323.04	336.055	0.50	
26436.00	90.370	340.960	6108.45	19358.40	17748.73	-7873.51	1727358.63	14542035.69	40°02'29.7827"N	80°41'21.7001"W	19416.74	336.077	0.62	
26498.00	90.220	340.630	6108.13	19420.40	17807.28	-7893.90	1727338.24	14542094.22	40°02'30.3620"N	80°41'21.9597"W	19478.53	336.092	0.58	
26523.00‡	90.220	340.630	6108.04	19445.40	17830.87	-7902.19	1727329.95	14542117.79	40°02'30.5953"N	80°41'22.0653"W	19503.45	336.098	0.00	Proj to TD

HOLE & CASING SECTIONS

- Ref Wellbore: David Reinbeau MSH 201H AWB Ref Wellpath: David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'

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]
13.375in Casing	26.00	530.00	504.00	26.00	530.00	0.00	0.00	-0.59	-0.27
9.625in Casing	26.00	2294.00	2268.00	26.00	2242.79	0.00	0.00	-259.31	-204.26
5.5in Casing	26.00	26528.00	26502.00	26.00	N/A	0.00	0.00	N/A	N/A



Actual Wellpath Report

David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	David Reinbeau MSH 201H
Field	Marshall	API	47051024400000
Facility	David Reinbeau MSH Pad	Wellbore	David Reinbeau MSH 201H AWB
Slot	201H		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
David Reinbeau MSH 201H BHL rev 5	6103.00	17830.60	-7899.24	1727332.90	14542117.52	40°02'30.5926"N	80°41'22.0273"W	point
David Reinbeau MSH 201H BHL rev 6	6119.00	17830.60	-7899.24	1727332.90	14542117.52	40°02'30.5926"N	80°41'22.0273"W	point
David Reinbeau MSH 201H LP rev 5	6355.00	-557.88	-1393.39	1733836.21	14523736.25	39°59'28.6408"N	80°39'59.2639"W	point

WELLPATH COMPOSITION - Ref Wellbore: David Reinbeau MSH 201H AWB Ref Wellpath: David Reinbeau MSH 201H awp 100' - 26498' Proj: 26523'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	653.00	Gyrodatta 2015 - GC+WIR+DPIPE	1 Imported Gyro 100' - 653'	David Reinbeau MSH 201H AWB	9/3/2022
653.00	2222.00	OWSG MWD rev2 + HRGM	2 Tally MWD 690' - 2222'	David Reinbeau MSH 201H AWB	9/3/2022
2222.00	5106.00	OWSG MWD rev2 + HRGM	3 Tally MWD 2355' - 5106'	David Reinbeau MSH 201H AWB	9/3/2022
5106.00	26523.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	4 BH MWD 5148' - 26498'	David Reinbeau MSH 201H AWB	9/3/2022



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Well Name: David Reinbeau MSH 201H

47051024400000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	426.00	426.00	
Top of Salt Water	883.00	883.00	NA	NA	
Pittsburgh Coal	773.00	773.00	782.00	782.00	
Pottsville (ss)	881.00	881.00	1016.00	1016.00	
Raven Cliff (ss)	1213.00	1213.00	1457.00	1453.00	
Maxton (ss)	1457.00	1453.00	1814.00	1790.00	
Big Injun (ss)	1923.00	1892.00	2376.00	2320.00	
Berea (siltstone)	2376.00	2320.00	2401.00	2343.00	
Rhinestreet (shale)	6058.00	5782.00	6343.00	6038.00	
Cashaqua (shale)	6343.00	6038.00	6428.00	6105.00	
Middlesex (shale)	6428.00	6105.00	6537.00	6182.00	
Burket (shale)	6537.00	6182.00	6564.00	6201.00	
Tully (ls)	6564.00	6201.00	6631.00	6240.00	
Mahantango (shale)	6631.00	6240.00	6838.00	6331.00	
GAS	GAS	GAS	GAS	GAS	GAS