



SWN PRODUCTION COMPANY, LLC



Location: Marshall County, WV
 Field: Marshall
 Facility: Yocum MSH Pad

Slot: 206H
 Well: Yocum MSH 206H
 Wellbore: Yocum MSH 206H AWB

Plot reference wellpath is Yocum MSH 206H AWB_ awp 192 - 22108' Proj: 22108'	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to SDC 41 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to SDC 41 (RKB)	Scale: True distance
SDC 41 (RKB) to Mean Sea Level: 1078.7 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: 206H): -1052.7 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: tranlam on 2023-02-05; Database: WA_MPL_EASTERNUS_Defn

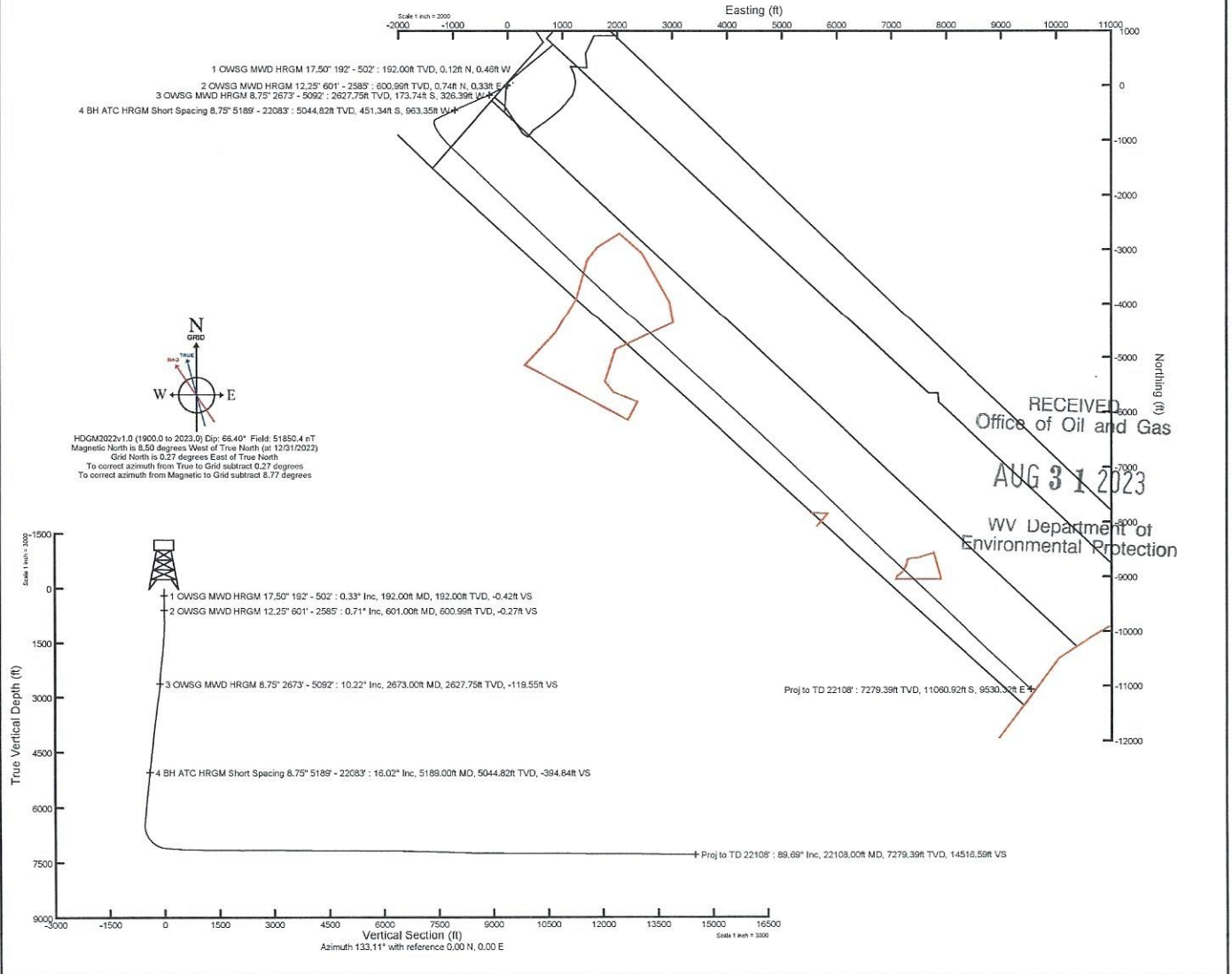
Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Yocum MSH Pad			1757446.734	14429785.622	39°43'58.8360"N	80°35'1.4240"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
206H	-72.32	-44.29	1757402.460	14429713.330	39°43'58.1233"N	80°35'1.9952"W
SDC 41 (RKB) to Ground level (At Slot: 206H)					26ft	
Mean Sea Level to Ground level (At Slot: 206H)					-1052.7ft	
SDC 41 (RKB) to Mean Sea Level					1078.7ft	

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
22108.00	89.690	133.300	7279.39	-11060.92	9530.32	1766929.10	14418656.69	39°42'8.3571"N	80°33'0.7201"W

API: 47051024640000
 BH JOB: 111435748
 DURATION: 01.28.2023 to 02.04.2023
 RIG: SDC 41



03/15/2024

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / UTM Zone 17 North, US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Tranlam
Scale	0.999616	Report Generated	2/5/2023 at 8:27:10 PM
Convergence at slot	0.27° 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	-72.32	-44.29	1757402.46	14429713.33	39°43'58.1233"N	80°35'1.9952"W
Facility Reference Pt			1757446.73	14429785.62	39°43'58.8360"N	80°35'1.4240"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 (RKB) to Facility Vertical Datum	1078.70ft
Horizontal Reference Pt	Slot	SDC 41 (RKB) to Mean Sea Level	1078.70ft
Vertical Reference Pt	SDC 41 (RKB)	SDC 41 (RKB) to Ground Level at Slot (206H)	26.00ft
MD Reference Pt	SDC 41 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	133.11°

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Actual Wellpath Report

Yocum MSH 206H AWB_awp 192' - 22108' Proj: 22108'

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Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
0.00†	0.000	284.510	0.00	0.00	0.00	0.00	1757402.46	14429713.33	39°43'58.1233"N	80°35'1.9952"W	0.00	0.000	0.00
26.00	0.000	284.510	26.00	0.00	0.00	0.00	1757402.46	14429713.33	39°43'58.1233"N	80°35'1.9952"W	0.00	0.000	0.00
192.00	0.330	284.510	192.00	-0.42	0.12	-0.46	1757402.00	14429713.45	39°43'58.1245"N	80°35'2.0011"W	0.48	284.510	0.20
238.00	0.090	31.590	238.00	-0.54	0.18	-0.57	1757401.89	14429713.51	39°43'58.1252"N	80°35'2.0025"W	0.60	287.805	0.80
329.00	0.230	4.990	329.00	-0.67	0.43	-0.52	1757401.94	14429713.76	39°43'58.1276"N	80°35'2.0018"W	0.67	309.429	0.17
420.00	0.110	220.930	420.00	-0.78	0.54	-0.56	1757401.90	14429713.87	39°43'58.1287"N	80°35'2.0024"W	0.78	314.086	0.36
502.00	0.270	50.050	502.00	-0.75	0.61	-0.46	1757402.00	14429713.94	39°43'58.1293"N	80°35'2.0011"W	0.76	322.636	0.46
601.00	0.710	91.290	600.99	-0.27	0.74	0.33	1757402.79	14429714.07	39°43'58.1306"N	80°35'1.9910"W	0.81	23.846	0.54
691.00	0.790	95.640	690.99	0.64	0.67	1.50	1757403.96	14429714.00	39°43'58.1299"N	80°35'1.9759"W	1.65	65.993	0.11
784.00	0.490	128.930	783.98	1.55	0.36	2.45	1757404.91	14429713.69	39°43'58.1267"N	80°35'1.9638"W	2.48	81.719	0.50
875.00	1.390	201.810	874.97	2.33	-0.91	2.34	1757404.80	14429712.42	39°43'58.1142"N	80°35'1.9653"W	2.51	111.278	1.46
966.00	3.130	224.830	965.90	2.66	-3.70	0.18	1757402.64	14429709.63	39°43'58.0868"N	80°35'1.9931"W	3.70	177.189	2.12
1058.00	5.180	231.950	1057.65	1.95	-8.04	-4.86	1757397.60	14429705.29	39°43'58.0441"N	80°35'2.0579"W	9.40	211.150	2.29
1149.00	6.320	242.230	1148.19	-0.32	-12.91	-12.53	1757389.94	14429700.43	39°43'57.9963"N	80°35'2.1563"W	17.99	224.145	1.68
1241.00	7.180	253.990	1239.56	-4.93	-16.85	-22.53	1757379.93	14429696.48	39°43'57.9578"N	80°35'2.2847"W	28.14	233.210	1.76
1332.00	7.970	254.350	1329.77	-11.13	-20.12	-34.08	1757368.40	14429693.22	39°43'57.9260"N	80°35'2.4326"W	39.57	239.437	0.87
1424.00	9.490	247.430	1420.70	-17.56	-24.75	-47.22	1757355.26	14429688.59	39°43'57.8808"N	80°35'2.6011"W	53.32	242.336	2.01
1515.00	11.590	242.830	1510.16	-23.73	-31.81	-62.28	1757340.20	14429681.53	39°43'57.8118"N	80°35'2.7943"W	69.94	242.946	2.48
1606.00	13.860	238.380	1598.92	-29.69	-41.70	-79.70	1757322.79	14429671.65	39°43'57.7149"N	80°35'3.0178"W	89.95	242.382	2.72
1698.00	15.750	238.260	1687.86	-35.85	-54.05	-99.71	1757302.79	14429659.30	39°43'57.5938"N	80°35'3.2746"W	113.41	241.540	2.05
1790.00	16.450	241.650	1776.26	-43.26	-66.80	-121.79	1757280.72	14429646.56	39°43'57.4687"N	80°35'3.5580"W	138.91	241.255	1.27
1881.00	16.640	246.270	1863.49	-52.48	-78.16	-145.06	1757257.46	14429635.20	39°43'57.3575"N	80°35'3.8565"W	164.78	241.682	1.46
1973.00	17.150	247.280	1951.52	-63.22	-88.70	-169.63	1757232.90	14429624.66	39°43'57.2545"N	80°35'4.1717"W	191.42	242.394	0.64
2064.00	17.790	244.130	2038.33	-73.70	-99.95	-194.51	1757208.02	14429613.42	39°43'57.1445"N	80°35'4.4909"W	218.69	242.803	1.25
2154.00	17.000	241.430	2124.21	-82.76	-112.24	-218.44	1757184.11	14429601.13	39°43'57.0241"N	80°35'4.7978"W	245.59	242.804	1.25
2246.00	15.960	241.280	2212.43	-90.94	-124.75	-241.34	1757161.21	14429588.63	39°43'56.9015"N	80°35'5.0917"W	271.68	242.665	1.13
2337.00	15.400	243.960	2300.04	-99.14	-136.07	-263.17	1757139.39	14429577.31	39°43'56.7907"N	80°35'5.3718"W	296.27	242.660	1.01
2427.00	13.630	242.660	2387.17	-106.94	-146.19	-283.33	1757119.24	14429567.20	39°43'56.6916"N	80°35'5.6304"W	318.82	242.708	2.00
2518.00	12.360	238.130	2475.84	-113.05	-156.25	-301.13	1757101.45	14429557.14	39°43'56.5929"N	80°35'5.8588"W	339.25	242.575	1.79
2585.00	11.740	235.640	2541.36	-116.39	-163.89	-312.84	1757089.74	14429549.51	39°43'56.5180"N	80°35'6.0092"W	353.17	242.352	1.21



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Actual Wellpath Report

WV Department of
Environmental Protection

Yocum MSH 206H AWB_ awp 192' - 22108' Proj: 22108'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
2673.00	10.220	232.060	2627.75	-119.55	-173.74	-326.39	1757076.19	14429539.66	39°43'56.4213"N	80°35'6.1832"W	369.75	241.973	1.89
2719.00	11.660	238.340	2672.91	-121.40	-178.69	-333.57	1757069.02	14429534.71	39°43'56.3727"N	80°35'6.2754"W	378.41	241.822	4.06
2810.00	14.180	245.660	2761.61	-128.09	-188.11	-351.55	1757051.04	14429525.29	39°43'56.2804"N	80°35'6.5062"W	398.72	241.849	3.30
2900.00	15.460	250.010	2848.62	-137.75	-196.76	-372.87	1757029.73	14429516.65	39°43'56.1959"N	80°35'6.7795"W	421.60	242.180	1.88
2991.00	16.830	250.810	2936.03	-149.36	-205.23	-396.71	1757005.90	14429508.18	39°43'56.1132"N	80°35'7.0852"W	446.66	242.646	1.53
3082.00	18.370	251.120	3022.76	-162.22	-214.20	-422.72	1756979.90	14429499.21	39°43'56.0258"N	80°35'7.4187"W	473.90	243.128	1.70
3172.00	18.340	250.010	3108.18	-175.29	-223.63	-449.45	1756953.18	14429489.78	39°43'55.9338"N	80°35'7.7613"W	502.01	243.546	0.39
3262.00	17.460	247.820	3193.83	-187.34	-233.57	-475.26	1756927.38	14429479.85	39°43'55.8368"N	80°35'8.0922"W	529.55	243.828	1.23
3354.00	17.270	246.320	3281.64	-198.49	-244.27	-500.55	1756902.11	14429469.16	39°43'55.7322"N	80°35'8.4165"W	556.97	243.988	0.53
3445.00	17.130	246.200	3368.57	-209.07	-255.10	-525.18	1756877.48	14429458.33	39°43'55.6263"N	80°35'8.7325"W	583.86	244.092	0.16
3539.00	17.170	246.600	3458.39	-220.03	-266.20	-550.58	1756852.09	14429447.24	39°43'55.5178"N	80°35'9.0582"W	611.55	244.197	0.13
3631.00	16.990	246.400	3546.33	-230.75	-276.97	-575.36	1756827.32	14429436.47	39°43'55.4124"N	80°35'9.3760"W	638.55	244.294	0.21
3720.00	16.780	246.430	3631.49	-240.98	-287.31	-599.05	1756803.64	14429426.13	39°43'55.3113"N	80°35'9.6799"W	664.39	244.377	0.24
3811.00	16.950	246.660	3718.58	-251.48	-297.82	-623.27	1756779.43	14429415.62	39°43'55.2086"N	80°35'9.9905"W	690.77	244.460	0.20
3902.00	17.280	248.090	3805.55	-262.49	-308.12	-647.99	1756754.72	14429405.33	39°43'55.1079"N	80°35'10.3075"W	717.51	244.569	0.59
3992.00	16.720	247.530	3891.62	-273.49	-318.06	-672.35	1756730.37	14429395.40	39°43'55.0108"N	80°35'10.6200"W	743.79	244.683	0.65
4085.00	15.850	245.710	3980.88	-283.90	-328.39	-696.29	1756706.44	14429385.06	39°43'54.9098"N	80°35'10.9270"W	769.85	244.750	1.08
4176.00	15.130	243.290	4068.58	-292.77	-338.84	-718.23	1756684.51	14429374.62	39°43'54.8075"N	80°35'11.2084"W	794.15	244.743	1.06
4266.00	13.950	241.600	4155.70	-300.26	-349.28	-738.26	1756664.48	14429364.18	39°43'54.7052"N	80°35'11.4654"W	816.72	244.680	1.39
4361.00	13.700	243.390	4247.94	-307.79	-359.77	-758.39	1756644.36	14429353.70	39°43'54.6025"N	80°35'11.7237"W	839.40	244.621	0.52
4453.00	14.500	246.910	4337.17	-316.22	-369.17	-778.73	1756624.03	14429344.31	39°43'54.5106"N	80°35'11.9846"W	861.80	244.636	1.27
4545.00	16.090	249.850	4425.91	-326.60	-378.08	-801.30	1756601.47	14429335.40	39°43'54.4236"N	80°35'12.2739"W	886.01	244.741	1.92
4636.00	15.030	248.600	4513.58	-337.35	-386.73	-824.12	1756578.66	14429326.75	39°43'54.3391"N	80°35'12.5666"W	910.35	244.861	1.22
4727.00	15.550	246.600	4601.36	-347.29	-395.88	-846.30	1756556.49	14429317.61	39°43'54.2497"N	80°35'12.8510"W	934.31	244.931	0.81
4817.00	16.630	244.330	4687.83	-356.76	-406.25	-868.98	1756533.81	14429307.24	39°43'54.1482"N	80°35'13.1419"W	959.25	244.944	1.39
4909.00	16.320	243.620	4776.05	-366.06	-417.69	-892.43	1756510.38	14429295.80	39°43'54.0362"N	80°35'13.4427"W	985.34	244.919	0.40
5001.00	16.410	243.730	4864.33	-375.16	-429.19	-915.66	1756487.15	14429284.31	39°43'53.9236"N	80°35'13.7407"W	1011.25	244.887	0.10
5092.00	16.280	245.830	4951.65	-384.62	-440.10	-938.82	1756464.00	14429273.40	39°43'53.8169"N	80°35'14.0379"W	1036.86	244.884	0.66
5189.00	16.020	244.920	5044.82	-394.84	-451.34	-963.35	1756439.48	14429262.17	39°43'53.7069"N	80°35'14.3525"W	1063.84	244.896	0.37
5281.00	15.850	245.520	5133.28	-404.35	-461.93	-986.28	1756416.56	14429251.58	39°43'53.6033"N	80°35'14.6466"W	1089.10	244.904	0.26

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Actual Wellpath Report

Yocum MSH 206H AWB_ awp 192' - 22108' Proj: 22108'
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Slot	206H		

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5373.00	15.950	244.480	5221.77	-413.74	-472.58	-1009.12	1756393.73	14429240.93	39°43'53.4991"N	80°35'14.9396"W	1114.30	244.906	0.33
5465.00	16.530	244.970	5310.09	-423.22	-483.56	-1032.39	1756370.47	14429229.96	39°43'53.3916"N	80°35'15.2380"W	1140.03	244.902	0.65
5558.00	16.250	244.730	5399.31	-432.94	-494.71	-1056.15	1756346.72	14429218.81	39°43'53.2825"N	80°35'15.5427"W	1166.27	244.901	0.31
5648.00	16.070	245.040	5485.76	-442.24	-505.35	-1078.83	1756324.05	14429208.18	39°43'53.1784"N	80°35'15.8337"W	1191.32	244.901	0.22
5741.00	16.420	244.330	5575.05	-451.80	-516.47	-1102.34	1756300.54	14429197.06	39°43'53.0695"N	80°35'16.1353"W	1217.33	244.896	0.43
5832.00	15.890	244.630	5662.45	-461.03	-527.38	-1125.19	1756277.70	14429186.15	39°43'52.9628"N	80°35'16.4284"W	1242.65	244.887	0.59
5924.00	15.860	244.140	5750.94	-470.16	-538.26	-1147.88	1756255.02	14429175.28	39°43'52.8563"N	80°35'16.7195"W	1267.82	244.877	0.15
6015.00	15.830	244.910	5838.49	-479.23	-548.95	-1170.31	1756232.60	14429164.60	39°43'52.7517"N	80°35'17.0072"W	1292.66	244.871	0.23
6107.00	15.540	243.740	5927.06	-488.23	-559.72	-1192.73	1756210.19	14429153.83	39°43'52.6462"N	80°35'17.2948"W	1317.53	244.860	0.47
6199.00	15.650	244.400	6015.67	-497.08	-570.53	-1214.97	1756187.96	14429143.02	39°43'52.5404"N	80°35'17.5801"W	1342.26	244.846	0.23
6291.00	15.670	243.390	6104.26	-505.89	-581.46	-1237.27	1756165.67	14429132.09	39°43'52.4334"N	80°35'17.8662"W	1367.09	244.829	0.30
6382.00	15.480	243.430	6191.92	-514.37	-592.40	-1259.12	1756143.83	14429121.16	39°43'52.3263"N	80°35'18.1465"W	1391.52	244.804	0.21
6475.00	15.680	243.190	6281.50	-522.99	-603.62	-1281.44	1756121.52	14429109.95	39°43'52.2164"N	80°35'18.4328"W	1416.49	244.777	0.23
6567.00	15.980	243.060	6370.01	-531.58	-614.96	-1303.82	1756099.14	14429098.60	39°43'52.1053"N	80°35'18.7200"W	1441.57	244.749	0.33
6657.00	15.810	231.950	6456.59	-537.69	-628.14	-1324.53	1756078.45	14429085.44	39°43'51.9761"N	80°35'18.9857"W	1465.92	244.628	3.38
6749.00	16.300	202.190	6545.15	-535.00	-647.85	-1339.30	1756063.68	14429065.73	39°43'51.7819"N	80°35'19.1759"W	1487.76	244.186	8.87
6841.00	20.550	179.350	6632.53	-519.20	-676.00	-1344.00	1756058.98	14429037.59	39°43'51.5040"N	80°35'19.2378"W	1504.43	243.299	9.02
6934.00	26.650	162.530	6717.80	-489.68	-712.29	-1337.54	1756065.44	14429001.32	39°43'51.1450"N	80°35'19.1572"W	1515.38	241.963	9.71
7026.00	33.490	154.870	6797.40	-448.07	-755.02	-1320.54	1756082.43	14428958.61	39°43'50.7220"N	80°35'18.9421"W	1521.14	240.241	8.51
7117.00	41.140	149.730	6869.74	-395.98	-803.68	-1294.74	1756108.22	14428909.96	39°43'50.2398"N	80°35'18.6148"W	1523.90	238.171	9.07
7209.00	48.370	145.540	6935.04	-333.31	-858.26	-1259.98	1756142.97	14428855.41	39°43'49.6990"N	80°35'18.1731"W	1524.52	235.739	8.48
7301.00	56.030	142.850	6991.40	-262.02	-917.11	-1217.42	1756185.51	14428796.58	39°43'49.1154"N	80°35'17.6318"W	1524.20	233.009	8.64
7393.00	63.990	140.640	7037.35	-183.30	-979.58	-1168.08	1756234.84	14428734.13	39°43'48.4957"N	80°35'17.0039"W	1524.46	230.016	8.90
7482.00	71.750	137.710	7070.86	-101.38	-1041.87	-1114.18	1756288.71	14428671.86	39°43'47.8777"N	80°35'16.3178"W	1525.42	226.921	9.24
7574.00	79.220	135.720	7093.90	-12.56	-1106.64	-1053.15	1756349.72	14428607.12	39°43'47.2348"N	80°35'15.5404"W	1527.67	223.581	8.38
7666.00	84.980	132.250	7106.55	78.50	-1169.88	-987.60	1756415.24	14428543.91	39°43'46.6069"N	80°35'14.7052"W	1531.00	220.171	7.29
7758.00	86.610	132.080	7113.29	170.24	-1231.46	-919.60	1756483.22	14428482.34	39°43'45.9952"N	80°35'13.8384"W	1536.93	216.751	1.78
7850.00	86.030	132.710	7119.20	262.04	-1293.36	-851.79	1756550.99	14428420.46	39°43'45.3803"N	80°35'12.9743"W	1548.66	213.368	0.93
7941.00	86.240	133.270	7125.33	352.83	-1355.27	-785.38	1756617.38	14428358.58	39°43'44.7655"N	80°35'12.1279"W	1566.39	210.092	0.66
8031.00	86.240	133.110	7131.23	442.64	-1416.74	-719.91	1756682.83	14428297.14	39°43'44.1551"N	80°35'11.2935"W	1589.16	206.937	0.18

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Actual Wellpath Report

Yocum MSH 206H AWB_ awp 192' - 22108' Proj: 22108'
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
8122.00	88.000	132.810	7135.80	533.52	-1478.67	-653.40	1756749.32	14428235.23	39°43'43.5400"N	80°35'10.4459"W	1616.60	203.840	1.96
8214.00	87.840	132.400	7139.14	625.46	-1540.91	-585.73	1756816.96	14428173.01	39°43'42.9218"N	80°35'9.5834"W	1648.48	200.813	0.48
8305.00	89.260	132.940	7141.45	716.42	-1602.57	-518.84	1756883.82	14428111.38	39°43'42.3094"N	80°35'8.7310"W	1684.46	197.940	1.67
8397.00	89.690	135.060	7142.29	808.40	-1666.47	-452.67	1756949.97	14428047.50	39°43'41.6749"N	80°35'7.8879"W	1726.85	195.197	2.35
8489.00	88.490	133.590	7143.75	900.36	-1730.74	-386.86	1757015.75	14427983.26	39°43'41.0367"N	80°35'7.0494"W	1773.45	192.600	2.06
8580.00	88.490	133.290	7146.15	991.33	-1793.29	-320.81	1757081.77	14427920.73	39°43'40.4155"N	80°35'6.2078"W	1821.76	190.143	0.33
8671.00	88.610	133.840	7148.45	1082.30	-1855.98	-254.89	1757147.66	14427858.06	39°43'39.7929"N	80°35'5.3678"W	1873.41	187.820	0.62
8763.00	89.350	133.610	7150.09	1174.28	-1919.56	-188.42	1757214.11	14427794.51	39°43'39.1615"N	80°35'4.5208"W	1928.79	185.606	0.84
8854.00	88.800	133.090	7151.56	1265.26	-1982.02	-122.26	1757280.25	14427732.07	39°43'38.5412"N	80°35'3.6777"W	1985.79	183.530	0.83
8947.00	89.820	133.800	7152.68	1358.25	-2045.97	-54.74	1757347.74	14427668.15	39°43'37.9062"N	80°35'2.8174"W	2046.70	181.533	1.34
9039.00	90.180	133.990	7152.68	1450.25	-2109.76	11.55	1757414.01	14427604.39	39°43'37.2727"N	80°35'1.9727"W	2109.79	179.686	0.44
9132.00	89.600	133.570	7152.86	1543.24	-2174.10	78.70	1757481.13	14427540.07	39°43'36.6338"N	80°35'1.1171"W	2175.53	177.927	0.77
9223.00	89.660	133.750	7153.44	1634.23	-2236.93	144.53	1757546.94	14427477.27	39°43'36.0099"N	80°35'0.2783"W	2241.59	176.303	0.21
9314.00	89.970	133.620	7153.74	1725.23	-2299.78	210.34	1757612.72	14427414.44	39°43'35.3857"N	80°34'59.4398"W	2309.38	174.774	0.37
9406.00	89.570	133.580	7154.11	1817.22	-2363.22	276.96	1757679.31	14427351.02	39°43'34.7556"N	80°34'58.5909"W	2379.40	173.316	0.44
9496.00	88.950	133.440	7155.27	1907.21	-2425.18	342.23	1757744.56	14427289.09	39°43'34.1403"N	80°34'57.7593"W	2449.21	171.968	0.71
9588.00	89.750	133.230	7156.31	1999.21	-2488.31	409.14	1757811.44	14427225.98	39°43'33.5133"N	80°34'56.9067"W	2521.72	170.663	0.90
9679.00	88.590	133.890	7157.63	2090.19	-2551.01	475.08	1757877.35	14427163.30	39°43'32.8906"N	80°34'56.0665"W	2594.87	169.451	1.47
9770.00	91.850	133.640	7157.28	2181.17	-2613.95	540.78	1757943.04	14427100.39	39°43'32.2656"N	80°34'55.2293"W	2669.30	168.311	3.59
9862.00	92.220	134.370	7154.01	2273.10	-2677.82	606.92	1758009.14	14427036.54	39°43'31.6314"N	80°34'54.3868"W	2745.74	167.230	0.89
9953.00	91.350	133.910	7151.18	2364.04	-2741.16	672.19	1758074.39	14426973.22	39°43'31.0024"N	80°34'53.5551"W	2822.38	166.222	1.08
10044.00	90.120	134.110	7150.01	2455.02	-2804.38	737.63	1758139.81	14426910.03	39°43'30.3746"N	80°34'52.7214"W	2899.77	165.263	1.37
10134.00	90.250	133.960	7149.72	2545.01	-2866.94	802.33	1758204.48	14426847.50	39°43'29.7533"N	80°34'51.8970"W	2977.09	164.365	0.22
10225.00	90.180	133.110	7149.38	2636.01	-2929.62	868.30	1758270.43	14426784.84	39°43'29.1308"N	80°34'51.0565"W	3055.59	163.491	0.94
10315.00	89.660	133.610	7149.51	2726.00	-2991.41	933.74	1758335.84	14426723.07	39°43'28.5171"N	80°34'50.2227"W	3133.75	162.665	0.80
10406.00	88.950	133.500	7150.61	2816.99	-3054.11	999.68	1758401.75	14426660.40	39°43'27.8945"N	80°34'49.3825"W	3213.56	161.876	0.79
10496.00	89.170	133.450	7152.09	2906.98	-3116.03	1064.98	1758467.03	14426598.51	39°43'27.2796"N	80°34'48.5505"W	3292.99	161.131	0.25
10587.00	89.170	133.870	7153.40	2997.97	-3178.84	1130.81	1758532.83	14426535.71	39°43'26.6557"N	80°34'47.7118"W	3373.99	160.418	0.46
10677.00	89.880	133.940	7154.15	3087.95	-3241.25	1195.65	1758597.65	14426473.33	39°43'26.0359"N	80°34'46.8857"W	3454.75	159.752	0.79
10768.00	89.010	134.010	7155.03	3178.94	-3304.44	1261.14	1758663.11	14426410.17	39°43'25.4085"N	80°34'46.0514"W	3536.91	159.111	0.96



Actual Wellpath Report

Yocum MSH 206H AWB_awp 192' - 22108' Proj: 22108'



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Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
10858.00	89.010	133.920	7156.59	3268.91	-3366.91	1325.90	1758727.85	14426347.73	39°43'24.7881"N	80°34'45.2263"W	3618.57	158.505	0.10
10950.00	89.450	133.390	7157.82	3360.90	-3430.41	1392.46	1758794.38	14426284.25	39°43'24.1574"N	80°34'44.3783"W	3702.25	157.907	0.75
11040.00	89.450	134.240	7158.69	3450.89	-3492.71	1457.40	1758859.30	14426221.96	39°43'23.5387"N	80°34'43.5510"W	3784.58	157.351	0.94
11132.00	88.090	132.850	7160.66	3542.86	-3556.08	1524.07	1758925.94	14426158.63	39°43'22.9094"N	80°34'42.7016"W	3868.91	156.801	2.11
11225.00	91.170	132.700	7161.26	3635.85	-3619.23	1592.32	1758994.16	14426095.50	39°43'22.2821"N	80°34'41.8319"W	3954.02	156.252	3.32
11316.00	89.780	133.750	7160.51	3726.84	-3681.55	1658.62	1759060.44	14426033.21	39°43'21.6632"N	80°34'40.9871"W	4037.92	155.747	1.91
11407.00	89.600	132.490	7161.00	3817.84	-3743.74	1725.04	1759126.84	14425971.03	39°43'21.0454"N	80°34'40.1408"W	4122.06	155.261	1.40
11498.00	89.600	131.640	7161.64	3908.82	-3804.71	1792.60	1759194.37	14425910.09	39°43'20.4397"N	80°34'39.2799"W	4205.86	154.772	0.93
11590.00	89.540	133.340	7162.33	4000.81	-3866.85	1860.44	1759262.18	14425847.98	39°43'19.8225"N	80°34'38.4155"W	4291.12	154.307	1.85
11680.00	89.660	133.120	7162.96	4090.80	-3928.49	1926.01	1759327.72	14425786.36	39°43'19.2102"N	80°34'37.5800"W	4375.22	153.883	0.28
11781.00	89.510	132.860	7163.69	4191.80	-3997.36	1999.89	1759401.57	14425717.52	39°43'18.5262"N	80°34'36.6387"W	4469.72	153.421	0.30
11877.00	89.230	132.920	7164.74	4287.79	-4062.69	2070.22	1759471.88	14425652.21	39°43'17.8773"N	80°34'35.7426"W	4559.74	152.998	0.30
11974.00	89.290	130.730	7166.00	4384.76	-4127.37	2142.49	1759544.12	14425587.56	39°43'17.2347"N	80°34'34.8216"W	4650.31	152.566	2.26
12070.00	90.120	133.620	7166.49	4480.73	-4191.81	2213.63	1759615.23	14425523.14	39°43'16.5945"N	80°34'33.9151"W	4740.40	152.162	3.13
12167.00	90.120	132.870	7166.29	4577.73	-4258.27	2284.28	1759685.86	14425456.71	39°43'15.9344"N	80°34'33.0149"W	4832.27	151.789	0.77
12263.00	89.480	132.840	7166.62	4673.73	-4323.56	2354.66	1759756.21	14425391.44	39°43'15.2859"N	80°34'32.1182"W	4923.17	151.427	0.67
12359.00	89.780	133.790	7167.24	4769.72	-4389.42	2424.50	1759826.03	14425325.61	39°43'14.6318"N	80°34'31.2283"W	5014.50	151.086	1.04
12455.00	89.020	133.300	7168.25	4865.72	-4455.55	2494.08	1759895.58	14425259.50	39°43'13.9750"N	80°34'30.3419"W	5106.11	150.761	0.94
12552.00	89.660	130.120	7169.36	4962.67	-4520.08	2566.48	1759967.95	14425195.00	39°43'13.3339"N	80°34'29.4193"W	5197.88	150.412	3.34
12648.00	90.310	133.690	7169.39	5058.63	-4584.18	2637.92	1760039.36	14425130.92	39°43'12.6970"N	80°34'28.5090"W	5288.98	150.082	3.78
12745.00	88.770	128.970	7170.17	5155.55	-4648.22	2710.73	1760112.14	14425066.91	39°43'12.0607"N	80°34'27.5811"W	5380.89	149.750	5.12
12842.00	89.720	132.530	7171.45	5252.44	-4711.52	2784.20	1760185.58	14425003.63	39°43'11.4317"N	80°34'26.6448"W	5472.68	149.420	3.80
12938.00	88.800	132.880	7172.69	5348.43	-4776.62	2854.74	1760256.09	14424938.55	39°43'10.7849"N	80°34'25.7460"W	5564.68	149.135	1.03
13035.00	88.980	132.700	7174.57	5445.41	-4842.51	2925.91	1760327.23	14424872.70	39°43'10.1305"N	80°34'24.8392"W	5657.81	148.859	0.26
13132.00	89.050	132.210	7176.23	5542.39	-4907.97	2997.46	1760398.76	14424807.25	39°43'9.4802"N	80°34'23.9275"W	5750.91	148.586	0.51
13228.00	90.030	133.730	7177.00	5638.38	-4973.40	3067.70	1760468.98	14424741.85	39°43'8.8302"N	80°34'23.0326"W	5843.42	148.333	1.88
13325.00	89.600	133.180	7177.32	5735.38	-5040.12	3138.11	1760539.36	14424675.16	39°43'8.1676"N	80°34'22.1356"W	5937.22	148.092	0.72
13421.00	89.540	133.000	7178.04	5831.38	-5105.70	3208.22	1760609.44	14424609.61	39°43'7.5162"N	80°34'21.2425"W	6029.99	147.856	0.20
13518.00	89.450	131.460	7178.89	5928.36	-5170.89	3280.04	1760681.23	14424544.44	39°43'6.8686"N	80°34'20.3274"W	6123.46	147.612	1.59
13615.00	91.010	133.220	7178.50	6025.34	-5236.21	3351.73	1760752.90	14424479.14	39°43'6.2196"N	80°34'19.4139"W	6217.08	147.376	2.42

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13711.00	88.120	133.400	7179.23	6121.33	-5302.06	3421.58	1760822.71	14424413.32	39°43'5.5656"N	80°34'18.5241"W	6310.23	147.165	3.02
13808.00	89.260	130.560	7181.45	6218.27	-5366.91	3493.66	1760894.77	14424348.49	39°43'4.9212"N	80°34'17.6056"W	6403.86	146.937	3.15
13904.00	90.000	132.760	7182.07	6314.23	-5430.72	3565.37	1760966.45	14424284.71	39°43'4.2873"N	80°34'16.6918"W	6496.50	146.714	2.42
14000.00	89.880	132.950	7182.17	6410.23	-5496.01	3635.75	1761036.80	14424219.44	39°43'3.6387"N	80°34'15.7952"W	6589.75	146.514	0.23
14097.00	89.820	132.010	7182.42	6507.23	-5561.52	3707.29	1761108.31	14424153.96	39°43'2.9879"N	80°34'14.8838"W	6683.89	146.313	0.97
14194.00	88.890	132.440	7183.52	6604.21	-5626.70	3779.11	1761180.11	14424088.80	39°43'2.3403"N	80°34'13.9686"W	6778.01	146.113	1.06
14291.00	89.080	132.740	7185.24	6701.19	-5692.33	3850.51	1761251.48	14424023.19	39°43'1.6883"N	80°34'13.0589"W	6872.34	145.924	0.37
14387.00	88.860	132.430	7186.96	6797.17	-5757.29	3921.18	1761322.13	14423958.27	39°43'1.0431"N	80°34'12.1586"W	6965.77	145.742	0.40
14484.00	88.650	132.500	7189.07	6894.14	-5822.76	3992.72	1761393.64	14423892.82	39°43'0.3926"N	80°34'11.2471"W	7060.19	145.561	0.23
14581.00	88.610	132.320	7191.39	6991.10	-5888.16	4064.32	1761465.21	14423827.44	39°42'59.7429"N	80°34'10.3349"W	7154.66	145.385	0.19
14677.00	88.920	132.730	7193.46	7087.08	-5953.03	4135.05	1761535.91	14423762.60	39°42'59.0984"N	80°34'9.4337"W	7248.26	145.216	0.54
14774.00	88.370	132.910	7195.75	7184.05	-6018.94	4206.18	1761607.02	14423696.71	39°42'58.4437"N	80°34'8.5276"W	7343.00	145.053	0.60
14870.00	88.950	132.510	7198.00	7280.02	-6084.04	4276.70	1761677.51	14423631.64	39°42'57.7970"N	80°34'7.6291"W	7436.78	144.895	0.73
14967.00	88.280	132.400	7200.34	7376.98	-6149.50	4348.25	1761749.03	14423566.21	39°42'57.1467"N	80°34'6.7176"W	7531.51	144.736	0.70
15064.00	88.640	132.700	7202.95	7473.94	-6215.07	4419.68	1761820.43	14423500.66	39°42'56.4953"N	80°34'5.8076"W	7626.31	144.582	0.48
15160.00	88.860	132.940	7205.04	7569.92	-6280.30	4490.08	1761890.80	14423435.45	39°42'55.8472"N	80°34'4.9107"W	7720.30	144.437	0.34
15257.00	87.940	132.580	7207.75	7666.88	-6346.13	4561.27	1761961.97	14423369.65	39°42'55.1933"N	80°34'4.0038"W	7815.28	144.293	1.02
15354.00	87.510	132.810	7211.60	7763.80	-6411.86	4632.50	1762033.17	14423303.95	39°42'54.5403"N	80°34'3.0963"W	7910.25	144.152	0.50
15450.00	88.060	132.640	7215.31	7859.72	-6476.94	4702.97	1762103.62	14423238.89	39°42'53.8938"N	80°34'2.1986"W	8004.30	144.016	0.60
15546.00	88.060	132.970	7218.56	7955.67	-6542.14	4773.37	1762173.98	14423173.72	39°42'53.2461"N	80°34'1.3018"W	8098.43	143.884	0.34
15643.00	87.910	132.950	7221.97	8052.61	-6608.20	4844.31	1762244.90	14423107.68	39°42'52.5898"N	80°34'0.3981"W	8193.63	143.756	0.16
15740.00	88.210	133.620	7225.25	8149.55	-6674.67	4914.88	1762315.44	14423041.24	39°42'51.9296"N	80°33'59.4992"W	8288.98	143.634	0.76
15836.00	88.740	134.680	7227.81	8245.50	-6741.51	4983.74	1762384.27	14422974.42	39°42'51.2657"N	80°33'58.6222"W	8383.65	143.526	1.23
15933.00	87.440	131.940	7231.04	8342.43	-6808.00	5054.27	1762454.78	14422907.96	39°42'50.6052"N	80°33'57.7237"W	8479.07	143.410	3.13
16029.00	89.380	132.940	7233.71	8438.38	-6872.76	5125.09	1762525.57	14422843.23	39°42'49.9619"N	80°33'56.8216"W	8573.29	143.288	2.27
16126.00	90.370	134.800	7233.92	8535.37	-6939.98	5195.01	1762595.46	14422776.03	39°42'49.2942"N	80°33'55.9310"W	8668.99	143.183	2.17
16223.00	88.400	134.590	7234.96	8632.32	-7008.19	5263.96	1762664.38	14422707.84	39°42'48.6168"N	80°33'55.0530"W	8764.93	143.089	2.04
16319.00	88.460	133.070	7237.59	8728.28	-7074.65	5333.18	1762733.58	14422641.42	39°42'47.9567"N	80°33'54.1713"W	8859.65	142.989	1.58
16416.00	89.410	133.220	7239.39	8825.26	-7140.97	5403.94	1762804.31	14422575.12	39°42'47.2979"N	80°33'53.2699"W	8955.22	142.883	0.99
16513.00	89.480	133.520	7240.33	8922.25	-7207.58	5474.45	1762874.80	14422508.54	39°42'46.6362"N	80°33'52.3718"W	9050.90	142.782	0.32



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Actual Wellpath Report

Yocum MSH 206H AWB_ awp 192' - 22108' Proj: 22108'

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
16609.00	89.170	132.260	7241.46	9018.24	-7272.91	5544.78	1762945.10	14422443.23	39°42'45.9872"N	80°33'51.4759"W	9145.48	142.679	1.35
16705.00	89.910	133.050	7242.23	9114.23	-7337.95	5615.38	1763015.67	14422378.21	39°42'45.3410"N	80°33'50.5766"W	9240.02	142.575	1.13
16802.00	90.000	133.890	7242.31	9211.23	-7404.68	5685.78	1763086.04	14422311.51	39°42'44.6781"N	80°33'49.6800"W	9335.81	142.481	0.87
16898.00	89.540	133.630	7242.70	9307.22	-7471.08	5755.11	1763155.35	14422245.13	39°42'44.0186"N	80°33'48.7969"W	9430.71	142.392	0.55
16994.00	90.000	134.440	7243.08	9403.21	-7537.81	5824.13	1763224.34	14422178.43	39°42'43.3558"N	80°33'47.9180"W	9525.70	142.308	0.97
17091.00	90.090	133.800	7243.00	9500.19	-7605.34	5893.76	1763293.94	14422110.93	39°42'42.6851"N	80°33'47.0311"W	9621.72	142.226	0.67
17188.00	90.030	134.270	7242.90	9597.18	-7672.76	5963.49	1763363.65	14422043.53	39°42'42.0154"N	80°33'46.1430"W	9717.74	142.145	0.49
17285.00	90.220	132.950	7242.69	9694.18	-7739.67	6033.73	1763433.85	14421976.66	39°42'41.3509"N	80°33'45.2485"W	9813.68	142.061	1.37
17381.00	89.170	133.100	7243.20	9790.17	-7805.17	6103.90	1763504.01	14421911.18	39°42'40.7002"N	80°33'44.3546"W	9908.49	141.973	1.10
17478.00	89.660	133.090	7244.19	9887.17	-7871.43	6174.73	1763574.81	14421844.94	39°42'40.0418"N	80°33'43.4525"W	10004.34	141.888	0.51
17575.00	90.740	135.260	7243.85	9984.14	-7939.02	6244.30	1763644.34	14421777.37	39°42'39.3705"N	80°33'42.5666"W	10100.46	141.814	2.50
17671.00	89.110	132.130	7243.98	10080.12	-8005.33	6313.70	1763713.72	14421711.09	39°42'38.7119"N	80°33'41.6827"W	10195.49	141.738	3.68
17768.00	89.780	134.360	7244.92	10177.11	-8071.78	6384.35	1763784.34	14421644.67	39°42'38.0518"N	80°33'40.7829"W	10291.43	141.658	2.40
17865.00	90.310	133.580	7244.84	10274.10	-8139.12	6454.16	1763854.12	14421577.35	39°42'37.3828"N	80°33'39.8938"W	10387.56	141.586	0.97
17961.00	90.650	133.270	7244.04	10370.09	-8205.11	6523.88	1763923.82	14421511.39	39°42'36.7273"N	80°33'39.0059"W	10482.60	141.512	0.48
18058.00	90.090	133.410	7243.41	10467.09	-8271.68	6594.42	1763994.33	14421444.84	39°42'36.0660"N	80°33'38.1074"W	10578.62	141.437	0.60
18154.00	88.920	133.750	7244.24	10563.08	-8337.86	6663.96	1764063.85	14421378.69	39°42'35.4086"N	80°33'37.2217"W	10673.72	141.367	1.27
18251.00	89.080	133.490	7245.94	10660.06	-8404.77	6734.17	1764134.03	14421311.81	39°42'34.7440"N	80°33'36.3275"W	10769.83	141.297	0.31
18348.00	88.590	133.200	7247.91	10757.04	-8471.33	6804.70	1764204.53	14421245.27	39°42'34.0827"N	80°33'35.4293"W	10865.88	141.226	0.59
18445.00	88.770	134.910	7250.14	10854.00	-8538.76	6874.39	1764274.19	14421177.87	39°42'33.4130"N	80°33'34.5418"W	10962.10	141.163	1.77
18541.00	89.510	131.050	7251.58	10949.97	-8604.19	6944.60	1764344.38	14421112.47	39°42'32.7630"N	80°33'33.6476"W	11057.10	141.092	4.09
18638.00	89.850	133.740	7252.13	11046.95	-8669.58	7016.23	1764415.98	14421047.10	39°42'32.1132"N	80°33'32.7352"W	11152.99	141.017	2.80
18734.00	88.770	133.850	7253.28	11142.94	-8736.02	7085.52	1764485.24	14420980.69	39°42'31.4533"N	80°33'31.8528"W	11248.22	140.956	1.13
18831.00	89.170	133.860	7255.02	11239.91	-8803.21	7155.45	1764555.15	14420913.52	39°42'30.7859"N	80°33'30.9622"W	11344.47	140.895	0.41
18927.00	89.780	133.100	7255.90	11335.90	-8869.26	7225.11	1764624.78	14420847.49	39°42'30.1297"N	80°33'30.0751"W	11439.67	140.833	1.02
19024.00	89.420	133.450	7256.58	11432.90	-8935.76	7295.73	1764695.37	14420781.03	39°42'29.4691"N	80°33'29.1757"W	11535.83	140.770	0.52
19120.00	89.290	134.130	7257.66	11528.89	-9002.19	7365.02	1764764.64	14420714.62	39°42'28.8093"N	80°33'28.2932"W	11631.12	140.712	0.72
19217.00	89.510	133.810	7258.68	11625.87	-9069.53	7434.83	1764834.42	14420647.31	39°42'28.1403"N	80°33'27.4043"W	11727.45	140.656	0.40
19313.00	90.060	133.190	7259.04	11721.87	-9135.61	7504.47	1764904.03	14420581.25	39°42'27.4839"N	80°33'26.5175"W	11822.70	140.599	0.86
19410.00	89.880	133.170	7259.09	11818.87	-9201.98	7575.20	1764974.73	14420514.90	39°42'26.8245"N	80°33'25.6166"W	11918.90	140.538	0.19

Actual Wellpath Report

Yocum MSH 206H AWP_awp 192' - 22108' Proj: 22108'

REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH DATA (239 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]
19506.00	90.770	133.980	7258.54	11914.86	-9268.15	7644.75	1765044.25	14420448.76	39°42'26.1671"N	80°33'24.7309"W	12014.19	140.483	1.25
19603.00	89.780	133.460	7258.08	12011.85	-9335.19	7714.85	1765114.33	14420381.74	39°42'25.5012"N	80°33'23.8382"W	12110.52	140.429	1.15
19699.00	89.630	133.840	7258.57	12107.85	-9401.46	7784.31	1765183.76	14420315.51	39°42'24.8429"N	80°33'22.9537"W	12205.85	140.376	0.43
19796.00	89.140	133.110	7259.61	12204.84	-9468.19	7854.70	1765254.12	14420248.80	39°42'24.1800"N	80°33'22.0573"W	12302.15	140.321	0.91
19893.00	89.320	134.100	7260.92	12301.83	-9535.08	7924.93	1765324.33	14420181.93	39°42'23.5154"N	80°33'21.1629"W	12398.48	140.269	1.04
19990.00	89.010	133.640	7262.33	12398.81	-9602.30	7994.85	1765394.22	14420114.74	39°42'22.8478"N	80°33'20.2726"W	12494.87	140.219	0.57
20086.00	89.540	133.800	7263.55	12494.79	-9668.64	8064.22	1765463.57	14420048.42	39°42'22.1887"N	80°33'19.3891"W	12590.25	140.170	0.58
20183.00	90.120	134.100	7263.83	12591.78	-9735.96	8134.06	1765533.38	14419981.13	39°42'21.5200"N	80°33'18.4999"W	12686.68	140.122	0.67
20279.00	89.570	134.170	7264.09	12687.77	-9802.81	8202.96	1765602.25	14419914.30	39°42'20.8559"N	80°33'17.6226"W	12782.16	140.078	0.58
20376.00	89.540	133.780	7264.85	12784.75	-9870.16	8272.76	1765672.02	14419846.98	39°42'20.1869"N	80°33'16.7338"W	12878.61	140.032	0.40
20473.00	89.390	133.820	7265.75	12881.74	-9937.30	8342.77	1765742.00	14419779.87	39°42'19.5200"N	80°33'15.8423"W	12975.04	139.985	0.16
20569.00	89.600	134.100	7266.60	12977.73	-10003.93	8411.87	1765811.08	14419713.26	39°42'18.8581"N	80°33'14.9624"W	13070.51	139.941	0.36
20666.00	89.320	133.890	7267.51	13074.71	-10071.31	8481.65	1765880.83	14419645.92	39°42'18.1888"N	80°33'14.0739"W	13166.99	139.897	0.36
20762.00	89.450	133.940	7268.54	13170.69	-10137.89	8550.80	1765949.95	14419579.36	39°42'17.5274"N	80°33'13.1934"W	13262.46	139.854	0.15
20859.00	89.260	133.880	7269.64	13267.68	-10205.15	8620.68	1766019.81	14419512.12	39°42'16.8592"N	80°33'12.3036"W	13358.94	139.811	0.21
20955.00	89.510	134.120	7270.67	13363.66	-10271.84	8689.73	1766088.83	14419445.46	39°42'16.1968"N	80°33'11.4244"W	13454.44	139.770	0.36
21052.00	89.480	133.830	7271.52	13460.65	-10339.19	8759.53	1766158.61	14419378.14	39°42'15.5278"N	80°33'10.5356"W	13550.95	139.728	0.30
21148.00	89.260	133.220	7272.58	13556.64	-10405.29	8829.13	1766228.18	14419312.06	39°42'14.8710"N	80°33'9.6493"W	13646.38	139.685	0.68
21244.00	89.570	133.410	7273.56	13652.63	-10471.15	8898.98	1766298.00	14419246.23	39°42'14.2168"N	80°33'8.7599"W	13741.79	139.640	0.38
21341.00	89.080	133.100	7274.70	13749.62	-10537.61	8969.62	1766368.61	14419179.79	39°42'13.5564"N	80°33'7.8603"W	13838.18	139.596	0.60
21438.00	89.660	132.510	7275.77	13846.62	-10603.52	9040.78	1766439.75	14419113.91	39°42'12.9016"N	80°33'6.9541"W	13934.50	139.548	0.85
21534.00	90.000	133.340	7276.05	13942.61	-10668.90	9111.08	1766510.02	14419048.55	39°42'12.2520"N	80°33'6.0589"W	14029.86	139.503	0.93
21631.00	89.820	133.220	7276.20	14039.61	-10735.40	9181.69	1766580.60	14418982.08	39°42'11.5913"N	80°33'5.1596"W	14126.30	139.461	0.22
21727.00	89.290	133.010	7276.95	14135.61	-10801.01	9251.77	1766650.65	14418916.49	39°42'10.9394"N	80°33'4.2673"W	14221.71	139.418	0.59
21824.00	88.920	132.720	7278.46	14232.60	-10866.99	9322.86	1766721.71	14418850.54	39°42'10.2839"N	80°33'3.3620"W	14318.07	139.373	0.48
21920.00	89.910	133.060	7279.44	14328.59	-10932.32	9393.19	1766792.02	14418785.23	39°42'9.6347"N	80°33'2.4664"W	14413.45	139.330	1.09
22017.00	90.310	133.120	7279.26	14425.59	-10998.58	9464.02	1766862.83	14418719.00	39°42'8.9764"N	80°33'1.5643"W	14509.88	139.289	0.42
22083.00	89.690	133.300	7279.26	14491.59	-11043.77	9512.13	1766910.91	14418673.82	39°42'8.5274"N	80°33'0.9518"W	14575.51	139.261	0.98
22108.00‡	89.690	133.300	7279.39	14516.59	-11060.92	9530.32	1766929.10	14418656.69	39°42'8.3571"N	80°33'0.7201"W	14600.37	139.251	0.00

HOLE & CASING SECTIONS - Ref Wellbore: Yocum MSH 206H AWB Ref Wellpath: Yocum MSH 206H AWB_awp 192' - 22108' Proj: 22108'									
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	553.00	527.00	26.00	553.00	0.00	0.00	0.72	-0.16
9.625in Casing	26.00	2650.00	2624.00	26.00	2605.13	0.00	0.00	-171.21	-323.09
5.5in Casing	26.00	22108.00	22082.00	26.00	7279.39	0.00	0.00	-11060.92	9530.32

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Yocum MSH 206H LP Rev 2	7105.70	-1186.76	-985.19	1756417.65	14428527.03	39°43'46.4400"N	80°35'14.6753"W	point
Yocum MSH 206H LP Rev 3	7107.00	-1186.76	-985.19	1756417.65	14428527.03	39°43'46.4400"N	80°35'14.6753"W	point
Yocum MSH 206H BHL Rev 2	7280.70	-11046.04	9545.46	1766944.23	14418671.56	39°42'8.5034"N	80°33'0.5255"W	point
Yocum MSH 206H BHL Rev 3	7282.00	-11046.04	9545.46	1766944.23	14418671.56	39°42'8.5034"N	80°33'0.5255"W	point

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SWN PRODUCTION COMPANY, LLC	Well	Yocum MSH 206H
Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH COMPOSITION - Ref Wellbore: Yocum MSH 206H AWB Ref Wellpath: Yocum MSH 206H AWB_awp 192' - 22108' Proj: 22108'					
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	502.00	OWSG MWD rev2 + HRGM	1 OWSG MWD HRGM 17.50" 192' - 502'	Yocum MSH 206H AWB	1/27/2023
502.00	2585.00	OWSG MWD rev2 + HRGM	2 OWSG MWD HRGM 12.25" 601' - 2585'	Yocum MSH 206H AWB	1/27/2023
2585.00	5092.00	OWSG MWD rev2 + HRGM	3 OWSG MWD HRGM 8.75" 2673' - 5092'	Yocum MSH 206H AWB	1/27/2023
5092.00	22108.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	4 BH ATC HRGM Short Spacing 8.75" 5189' - 22083'	Yocum MSH 206H AWB	1/27/2023

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Field	Marshall	API/Legal	
Facility	Yocum MSH Pad	Wellbore	Yocum MSH 206H AWB
Slot	206H		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
192.00	0.330	284.510	192.00	1 OWSG MWD HRGM 17.50" 192' - 502'	
601.00	0.710	91.290	600.99	2 OWSG MWD HRGM 12.25" 601' - 2585'	
2673.00	10.220	232.060	2627.75	3 OWSG MWD HRGM 8.75" 2673' - 5092'	
5189.00	16.020	244.920	5044.82	4 BH ATC HRGM Short Spacing 8.75" 5189' - 22083'	
22108.00	89.690	133.300	7279.39	Proj to TD 22108'	

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