

**Provide Signature Page for
Directional Survey**



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'
Page 1 of 9

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 20 2018

RECEIVED

**BAKER
HUGHES**
a GE company



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 5.1
North Reference	Grid	User	Buiduyh
Scale	0.999919	Report Generated	28/Aug/2018 at 14:43
Convergence at slot	0.16° East	Database/Source file	WellArchitectDB/Zach_McCormick_Federal_Com_No._202H_awp_192_-_14828_Proj_14900_.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-60.00	0.00	592953.00	443252.00	32°13'05.734"N	104°01'57.959"W
Facility Reference Pt			592953.00	443312.00	32°13'06.328"N	104°01'57.957"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig: Patterson 297 (KB) to Facility Vertical Datum	2983.00ft
Horizontal Reference Pt	Slot	Rig: Patterson 297 (KB) to Mean Sea Level	2983.00ft
Vertical Reference Pt	Rig: Patterson 297 (KB)	Rig: Patterson 297 (KB) to Ground Level at Slot (Zach McCormick Fed 18-24S-29E RB No. 202H)	29.00ft
MD Reference Pt	Rig: Patterson 297 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	90.02°

We hereby certify that the surveys contained herein, are to the best of our knowledge a true and accurate account of the well.

MWD COORDINATOR



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 2 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 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	DLS (ft/100ft)	Comments
0.00	0.00	114.360	0.00	0.00	0.00	0.00	592953.00	443252.00	32°13'05.734"N	104°01'57.959"W	0.00	
29.00	0.00	114.360	29.00	0.00	0.00	0.00	592953.00	443252.00	32°13'05.734"N	104°01'57.959"W	0.00	
192.00	0.370	114.360	192.00	0.48	-0.22	0.48	592953.48	443251.78	32°13'05.732"N	104°01'57.953"W	0.23	
335.00	0.310	146.560	335.00	1.11	-0.73	1.11	592954.11	443251.27	32°13'05.727"N	104°01'57.946"W	0.14	
426.00	0.320	281.870	426.00	1.00	-0.88	1.00	592954.00	443251.12	32°13'05.725"N	104°01'57.947"W	0.84	17 1/2 BH MWD 192' - 426'
609.00	0.360	295.510	608.99	-0.02	-0.53	-0.02	592952.98	443251.47	32°13'05.729"N	104°01'57.959"W	0.05	
790.00	0.570	297.830	789.99	-1.33	0.13	-1.33	592951.67	443252.13	32°13'05.736"N	104°01'57.974"W	0.12	
974.00	0.410	328.390	973.98	-2.48	1.12	-2.48	592950.52	443253.12	32°13'05.745"N	104°01'57.987"W	0.16	
1068.00	1.500	6.470	1067.97	-2.52	2.63	-2.52	592950.48	443254.63	32°13'05.760"N	104°01'57.988"W	1.28	
1161.00	2.980	10.020	1160.89	-1.98	8.22	-1.98	592951.04	443256.22	32°13'05.796"N	104°01'57.981"W	1.60	
1255.00	3.180	9.640	1254.76	-1.10	11.20	-1.10	592951.90	443263.20	32°13'05.845"N	104°01'57.971"W	0.21	
1349.00	2.640	5.240	1348.64	-0.47	15.92	-0.47	592952.53	443267.92	32°13'05.892"N	104°01'57.963"W	0.62	
1488.00	3.780	11.220	1487.42	0.71	23.61	0.72	592953.72	443275.60	32°13'05.968"N	104°01'57.949"W	0.85	
1629.00	5.100	18.780	1627.99	3.63	34.10	3.64	592956.64	443286.10	32°13'06.072"N	104°01'57.915"W	1.02	
1723.00	5.050	8.850	1721.62	5.81	42.14	5.82	592958.62	443294.14	32°13'06.151"N	104°01'57.892"W	0.93	
1816.00	5.670	6.480	1814.22	6.75	50.75	6.77	592959.77	443302.75	32°13'06.236"N	104°01'57.878"W	0.71	
1910.00	7.240	5.170	1907.62	7.81	61.27	7.83	592960.83	443313.26	32°13'06.340"N	104°01'57.865"W	1.68	
2003.00	7.570	12.930	1999.84	9.70	73.07	9.73	592962.73	443325.07	32°13'06.457"N	104°01'57.843"W	1.13	
2097.00	7.900	18.280	2092.99	13.11	85.24	13.14	592966.14	443337.24	32°13'06.577"N	104°01'57.803"W	0.84	
2191.00	8.010	18.260	2188.09	17.19	97.59	17.22	592970.22	443349.59	32°13'06.659"N	104°01'57.765"W	0.12	
2284.00	8.100	23.360	2278.17	21.81	109.76	21.85	592974.85	443361.75	32°13'06.820"N	104°01'57.701"W	0.77	
2378.00	8.400	26.750	2371.20	27.52	121.97	27.57	592980.56	443373.96	32°13'06.940"N	104°01'57.634"W	0.61	
2472.00	8.060	29.950	2464.23	33.90	133.81	33.95	592986.94	443385.80	32°13'07.057"N	104°01'57.559"W	0.61	
2565.00	8.670	19.310	2556.25	39.47	146.08	39.52	592992.52	443398.07	32°13'07.179"N	104°01'57.494"W	1.79	
2659.00	8.010	12.560	2649.13	43.41	158.85	43.48	592996.48	443411.94	32°13'07.316"N	104°01'57.447"W	1.18	
2684.00	8.530	13.750	2673.84	44.27	163.66	44.33	592997.33	443415.65	32°13'07.353"N	104°01'57.437"W	2.05	12 1/4 BH MWD 609' - 2684'
2847.00	9.110	15.210	2834.91	50.52	187.86	50.59	593003.59	443439.84	32°13'07.592"N	104°01'57.364"W	0.38	
2941.00	10.510	17.600	2927.53	55.06	203.21	55.13	593008.13	443455.19	32°13'07.744"N	104°01'57.310"W	1.55	
3034.00	10.930	14.040	3018.91	59.76	219.85	59.84	593012.83	443471.83	32°13'07.908"N	104°01'57.255"W	0.84	
3128.00	11.440	14.960	3111.13	64.32	237.50	64.41	593017.40	443489.48	32°13'08.083"N	104°01'57.201"W	0.57	



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 3 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3221.00	12.590	13.910	3202.09	69.13	256.25	69.22	593022.22	443508.23	32°13'08.268"N	104°01'57.144"W	1.26	
3315.00	13.060	10.610	3293.74	73.55	276.63	73.64	593026.64	443528.61	32°13'08.470"N	104°01'57.092"W	0.93	
3409.00	12.140	11.100	3385.48	77.40	296.77	77.50	593030.49	443548.75	32°13'08.669"N	104°01'57.047"W	0.99	
3502.00	13.040	11.280	3476.24	81.33	316.66	81.44	593034.43	443568.63	32°13'08.865"N	104°01'57.000"W	0.97	
3690.00	13.900	10.720	3659.07	89.68	359.65	89.79	593042.78	443611.62	32°13'09.291"N	104°01'56.902"W	0.46	
3783.00	15.100	11.110	3749.10	94.06	382.51	94.20	593047.19	443634.48	32°13'09.517"N	104°01'56.850"W	1.29	
3877.00	15.400	11.530	3839.79	98.91	406.75	99.05	593052.04	443658.72	32°13'09.756"N	104°01'56.792"W	0.34	
4064.00	17.840	9.800	4018.97	108.73	459.32	108.89	593061.88	443711.28	32°13'10.276"N	104°01'56.676"W	1.33	
4157.00	16.900	10.510	4107.73	113.61	486.64	113.78	593066.77	443738.60	32°13'10.547"N	104°01'56.618"W	1.04	
4344.00	13.050	11.470	4288.34	122.78	534.08	122.84	593075.93	443788.03	32°13'11.016"N	104°01'56.610"W	2.08	
4438.00	13.960	13.160	4379.74	127.44	555.52	127.63	593080.62	443807.47	32°13'11.228"N	104°01'56.455"W	1.06	
4532.00	13.890	15.030	4470.98	132.94	577.46	133.14	593086.13	443829.41	32°13'11.445"N	104°01'56.390"W	0.48	
4626.00	14.330	15.750	4562.15	139.02	599.55	139.22	593092.21	443851.50	32°13'11.663"N	104°01'56.318"W	0.50	
4719.00	14.820	14.300	4652.15	145.07	622.15	145.29	593098.27	443874.10	32°13'11.887"N	104°01'56.247"W	0.66	
4908.00	13.430	14.460	4833.49	156.38	688.38	156.62	593109.60	443918.30	32°13'12.324"N	104°01'56.114"W	0.74	
5094.00	14.950	9.340	5015.76	165.76	711.43	166.00	593118.99	443963.37	32°13'12.770"N	104°01'56.003"W	1.05	
5187.00	15.050	9.490	5105.59	169.69	735.18	169.94	593122.93	443987.12	32°13'13.004"N	104°01'55.956"W	0.12	
5281.00	14.790	10.460	5196.42	173.87	759.01	174.13	593127.12	444010.95	32°13'13.240"N	104°01'55.907"W	0.38	
5375.00	14.440	10.810	5287.38	178.24	782.32	178.51	593131.49	444034.26	32°13'13.471"N	104°01'55.855"W	0.38	
5468.00	15.750	13.260	5377.16	183.31	808.03	183.59	593136.57	444057.98	32°13'13.705"N	104°01'55.795"W	1.61	
5562.00	14.630	13.500	5467.87	189.00	830.02	189.29	593142.28	444081.95	32°13'13.942"N	104°01'55.728"W	1.24	
5655.00	12.790	14.830	5558.21	194.37	851.40	194.67	593147.65	444103.33	32°13'14.154"N	104°01'55.665"W	2.01	
5749.00	11.530	14.690	5650.10	199.41	870.54	199.71	593152.70	444122.47	32°13'14.343"N	104°01'55.606"W	1.34	
5843.00	10.870	14.890	5742.31	204.06	888.20	204.37	593157.36	444140.12	32°13'14.518"N	104°01'55.551"W	0.70	
5938.00	10.930	16.270	5833.78	208.58	904.37	208.87	593161.88	444158.29	32°13'14.678"N	104°01'55.498"W	1.05	
6030.00	9.190	17.860	5926.48	213.13	919.29	213.45	593166.43	444171.22	32°13'14.825"N	104°01'55.444"W	0.84	
6123.00	7.920	17.240	6018.44	217.30	932.48	217.62	593170.61	444184.40	32°13'14.956"N	104°01'55.395"W	1.37	
6218.00	7.460	17.350	6112.59	221.07	944.62	221.40	593174.38	444196.54	32°13'15.076"N	104°01'55.351"W	0.48	
6310.00	6.560	18.410	6203.90	224.51	955.31	224.84	593177.82	444207.23	32°13'15.181"N	104°01'55.310"W	0.99	
6404.00	6.310	18.410	6297.31	227.92	965.27	228.28	593181.24	444217.19	32°13'15.280"N	104°01'55.270"W	0.29	



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'
Page 4 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
6498.00	5.280	26.100	6390.82	231.54	974.03	231.88	593184.86	444225.95	32°13'15.366°N	104°01'55.228°W	1.31		
6591.00	3.120	34.070	6483.57	234.83	979.97	235.18	593188.16	444231.89	32°13'15.425°N	104°01'55.189°W	2.40		
6685.00	2.640	20.250	6577.45	237.01	984.12	237.36	593190.34	444236.04	32°13'15.466°N	104°01'55.164°W	0.89		
6779.00	1.410	359.950	6671.39	237.76	987.31	238.11	593191.09	444239.23	32°13'15.497°N	104°01'55.155°W	1.50		
6872.00	1.130	310.430	6764.37	237.08	989.05	237.41	593190.39	444240.98	32°13'15.515°N	104°01'55.183°W	1.18		
7059.00	0.470	242.330	6951.36	234.98	989.89	235.32	593188.31	444241.80	32°13'15.523°N	104°01'55.187°W	0.56		
7246.00	2.650	295.750	7138.28	230.41	991.41	230.75	593183.73	444243.33	32°13'15.538°N	104°01'55.240°W	1.28		
7340.00	1.440	299.550	7232.22	227.42	992.93	227.77	593180.75	444244.85	32°13'15.553°N	104°01'55.275°W	1.29		
7527.00	1.440	66.100	7419.19	227.52	995.05	227.87	593180.85	444246.96	32°13'15.574°N	104°01'55.274°W	1.38		
7714.00	1.830	350.460	7606.14	229.23	998.62	229.58	593182.58	444250.54	32°13'15.610°N	104°01'55.254°W	1.01		
7902.00	2.160	30.970	7794.05	230.61	1004.30	230.96	593183.94	444256.21	32°13'15.666°N	104°01'55.237°W	0.75		
8088.00	1.600	145.280	7979.99	233.89	1005.17	234.24	593187.22	444257.08	32°13'15.674°N	104°01'55.199°W	1.71		
8276.00	1.010	187.990	8167.95	235.16	1001.37	235.51	593188.49	444253.29	32°13'15.637°N	104°01'55.185°W	0.58		
8463.00	0.880	167.550	8354.92	235.24	998.33	235.59	593188.57	444250.25	32°13'15.607°N	104°01'55.184°W	0.19		
8650.00	0.770	338.680	8541.91	235.09	998.10	235.44	593188.42	444250.02	32°13'15.604°N	104°01'55.186°W	0.88		
8837.00	1.310	125.010	8728.90	236.38	998.05	236.73	593189.71	444249.96	32°13'15.604°N	104°01'55.170°W	1.07		
9024.00	0.400	247.210	8915.88	237.53	996.57	237.88	593190.86	444248.48	32°13'15.589°N	104°01'55.157°W	0.83		
9211.00	0.550	303.170	9102.88	236.18	996.81	236.53	593189.51	444248.72	32°13'15.591°N	104°01'55.173°W	0.25		
9336.00	0.850	327.730	9227.87	235.18	997.92	235.53	593188.51	444249.84	32°13'15.603°N	104°01'55.184°W	0.33		
9428.00	2.650	49.400	9319.83	236.43	999.88	236.78	593189.78	444251.80	32°13'15.822°N	104°01'55.170°W	2.89		
9459.00	5.450	64.250	9350.75	238.30	1000.99	238.65	593191.63	444252.90	32°13'15.633°N	104°01'55.148°W	9.57		
9491.00	8.440	68.550	9382.51	241.86	1002.50	242.21	593195.19	444254.42	32°13'15.648°N	104°01'55.107°W	9.48		
9522.00	10.970	70.610	9413.07	246.76	1004.32	247.11	593200.09	444256.23	32°13'15.666°N	104°01'55.049°W	8.24		
9553.00	13.980	71.140	9443.33	253.08	1006.51	253.44	593206.41	444258.42	32°13'15.687°N	104°01'54.976°W	9.72		
9584.00	16.780	75.460	9473.22	260.98	1008.84	261.31	593214.28	444260.76	32°13'15.710°N	104°01'54.884°W	9.75		
9615.00	19.840	78.690	9502.65	270.45	1011.00	270.81	593223.78	444262.91	32°13'15.731°N	104°01'54.773°W	10.40		
9662.00	24.970	80.860	9546.09	288.08	1014.14	288.43	593241.41	444266.05	32°13'15.762°N	104°01'54.588°W	11.05		
9709.00	30.240	81.600	9587.72	309.60	1017.45	309.95	593262.92	444269.36	32°13'15.794°N	104°01'54.318°W	11.24		
9756.00	35.740	82.220	9627.13	334.92	1021.04	335.28	593288.25	444272.95	32°13'15.829°N	104°01'54.023°W	11.72		
9803.00	41.250	80.030	9683.90	363.80	1025.58	364.18	593317.13	444277.50	32°13'15.873°N	104°01'53.688°W	12.08		



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 5 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9896.00	52.120	78.740	9727.61	430.19	1038.09	430.56	593383.52	444290.01	32°13'15.995"N	104°01'52.913"W	11.73	
9990.00	53.120	85.520	9784.72	504.11	1048.28	504.48	593457.43	444300.19	32°13'16.093"N	104°01'52.052"W	5.83	
10083.00	62.520	86.830	9834.19	582.56	1053.48	582.93	593535.88	444305.39	32°13'16.143"N	104°01'51.139"W	10.18	
10130.00	67.960	85.860	9853.87	625.13	1056.21	625.50	593578.45	444308.12	32°13'16.168"N	104°01'50.643"W	11.73	
10177.00	68.770	85.820	9871.20	668.70	1059.38	669.07	593622.02	444311.29	32°13'16.199"N	104°01'50.136"W	1.73	
10224.00	69.810	85.650	9887.89	712.52	1062.64	712.89	593665.83	444314.56	32°13'16.230"N	104°01'49.626"W	1.82	
10255.00	72.170	86.380	9898.04	741.73	1064.68	742.10	593695.04	444318.59	32°13'16.249"N	104°01'49.286"W	8.55	
10300.00	77.690	85.980	9909.74	785.07	1067.57	785.44	593738.38	444319.48	32°13'16.276"N	104°01'48.781"W	12.30	8 3/4 BH MWD 2847' - 10300'
10392.00	82.520	84.250	9925.54	875.34	1075.30	875.71	593828.84	444327.21	32°13'16.350"N	104°01'47.730"W	5.57	
10435.00	87.660	85.940	9929.21	918.01	1078.96	918.38	593871.31	444330.87	32°13'16.385"N	104°01'47.233"W	12.64	
10480.00	90.400	87.090	9929.96	962.91	1081.69	963.29	593916.21	444333.60	32°13'16.411"N	104°01'46.711"W	6.54	
10529.00	90.490	87.140	9929.58	1011.85	1084.16	1012.23	593965.14	444336.07	32°13'16.434"N	104°01'46.141"W	0.21	
10623.00	90.120	88.530	9929.08	1105.78	1087.71	1106.16	594059.06	444339.62	32°13'16.467"N	104°01'45.047"W	1.53	
10718.00	88.580	89.870	9930.16	1200.76	1089.04	1201.14	594154.04	444340.95	32°13'16.477"N	104°01'43.942"W	2.15	
10765.00	89.970	90.810	9930.75	1247.75	1088.78	1248.13	594201.03	444340.87	32°13'16.473"N	104°01'43.395"W	3.57	
10812.00	90.620	90.630	9930.51	1294.74	1088.17	1295.12	594248.02	444340.08	32°13'16.466"N	104°01'42.848"W	1.44	
10906.00	86.980	91.700	9932.48	1388.69	1086.26	1389.07	594341.95	444338.17	32°13'16.444"N	104°01'41.754"W	4.04	
11001.00	88.030	92.500	9936.62	1483.53	1082.78	1483.91	594436.79	444334.69	32°13'16.407"N	104°01'40.651"W	1.39	
11095.00	86.920	92.130	9940.76	1577.37	1078.99	1577.74	594530.61	444330.90	32°13'16.367"N	104°01'39.558"W	1.24	
11189.00	85.870	91.830	9948.87	1671.12	1075.74	1671.50	594624.38	444327.85	32°13'16.333"N	104°01'38.487"W	1.18	
11283.00	86.700	92.590	9952.76	1764.86	1072.13	1765.23	594718.08	444324.04	32°13'16.294"N	104°01'37.376"W	1.20	
11377.00	86.890	91.620	9958.01	1858.65	1068.68	1859.02	594811.88	444320.59	32°13'16.257"N	104°01'36.285"W	1.05	
11472.00	86.480	90.610	9963.51	1953.47	1066.83	1953.84	594906.68	444318.75	32°13'16.236"N	104°01'35.181"W	1.15	
11566.00	86.980	92.010	9968.87	2047.29	1064.69	2047.66	595000.49	444316.60	32°13'16.212"N	104°01'34.089"W	1.58	
11680.00	85.930	92.160	9974.68	2141.05	1061.27	2141.42	595094.24	444313.19	32°13'16.178"N	104°01'32.998"W	1.13	
11754.00	88.060	91.000	9979.61	2234.87	1058.69	2235.24	595188.06	444310.60	32°13'16.148"N	104°01'31.906"W	2.58	
11849.00	89.690	91.540	9981.47	2329.83	1056.58	2330.20	595283.01	444308.49	32°13'16.124"N	104°01'30.801"W	1.81	
11943.00	90.060	91.550	9981.68	2423.80	1054.05	2424.16	595376.96	444305.96	32°13'16.097"N	104°01'29.707"W	0.39	
12038.00	87.570	89.010	9983.64	2518.76	1053.58	2519.13	595471.92	444305.50	32°13'16.089"N	104°01'28.602"W	3.74	
12132.00	88.210	89.130	9987.10	2612.68	1055.11	2613.05	595565.83	444307.02	32°13'16.102"N	104°01'27.508"W	0.69	



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 6 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 stations)												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12226.00	88.770	88.700	9989.58	2706.63	1056.89	2707.00	595659.78	444308.80	32°13'16.117"N	104°01'26.415"W	0.75	
12321.00	87.840	87.290	9992.39	2801.53	1060.21	2801.90	595754.67	444312.12	32°13'16.147"N	104°01'25.310"W	1.78	
12415.00	87.350	85.610	9996.34	2895.26	1066.02	2895.63	595848.39	444317.94	32°13'16.202"N	104°01'24.219"W	1.86	
12509.00	89.410	86.060	9998.99	2988.97	1072.85	2989.34	595942.09	444324.76	32°13'16.266"N	104°01'23.128"W	2.24	
12604.00	91.420	88.340	9998.31	3083.84	1077.49	3084.21	596036.96	444328.40	32°13'16.310"N	104°01'22.023"W	3.20	
12698.00	90.430	89.840	9996.79	3177.81	1078.98	3178.19	596130.92	444330.89	32°13'16.322"N	104°01'20.929"W	1.91	
12792.00	89.910	90.440	9996.51	3271.81	1078.75	3272.18	596224.91	444330.66	32°13'16.317"N	104°01'19.835"W	0.84	
12887.00	91.140	90.820	9995.64	3366.80	1077.71	3367.17	596319.89	444329.62	32°13'16.304"N	104°01'18.730"W	1.36	
12981.00	88.950	91.360	9995.57	3460.77	1075.92	3461.15	596413.86	444327.83	32°13'16.283"N	104°01'17.636"W	2.40	
13012.00	87.190	91.200	9996.61	3491.75	1075.23	3492.12	596444.83	444327.14	32°13'16.276"N	104°01'17.275"W	5.70	
13075.00	85.190	90.880	10000.80	3554.59	1074.08	3554.97	596507.67	444326.00	32°13'16.262"N	104°01'16.544"W	3.21	
13170.00	83.980	91.120	10009.76	3649.15	1072.43	3649.53	596602.23	444324.35	32°13'16.243"N	104°01'15.443"W	1.30	
13264.00	84.970	91.020	10018.81	3742.70	1070.69	3743.08	596695.76	444322.60	32°13'16.223"N	104°01'14.354"W	1.06	
13359.00	86.670	89.900	10025.73	3837.44	1069.93	3837.81	596790.50	444321.84	32°13'16.213"N	104°01'13.252"W	2.14	
13453.00	88.020	88.290	10031.73	3931.23	1071.41	3931.81	596884.28	444323.32	32°13'16.225"N	104°01'12.160"W	1.84	
13547.00	88.650	87.460	10036.10	4025.06	1074.89	4025.43	596978.10	444326.80	32°13'16.257"N	104°01'11.067"W	2.93	
13642.00	89.660	87.430	10037.50	4119.95	1079.13	4120.33	597072.98	444331.04	32°13'16.296"N	104°01'09.963"W	1.06	
13737.00	89.230	86.870	10038.42	4214.83	1083.85	4215.20	597167.85	444335.76	32°13'16.340"N	104°01'08.858"W	0.74	
13831.00	88.860	86.320	10039.99	4308.64	1089.43	4309.02	597261.67	444341.34	32°13'16.393"N	104°01'07.766"W	0.71	
13925.00	89.660	88.820	10041.20	4402.54	1093.42	4402.92	597355.58	444345.32	32°13'16.428"N	104°01'06.673"W	2.78	
14020.00	90.710	89.290	10040.89	4497.53	1094.98	4497.91	597450.54	444346.89	32°13'16.442"N	104°01'05.567"W	1.21	
14114.00	87.070	88.870	10042.71	4591.48	1096.49	4591.86	597544.48	444348.40	32°13'16.454"N	104°01'04.473"W	3.90	
14208.00	86.300	87.850	10048.15	4685.28	1099.18	4685.67	597638.28	444351.08	32°13'16.478"N	104°01'03.382"W	1.36	
14302.00	87.290	86.830	10053.41	4779.03	1103.53	4779.42	597732.02	444355.44	32°13'16.518"N	104°01'02.290"W	1.51	
14398.00	88.580	87.450	10056.79	4872.85	1108.22	4873.23	597825.83	444360.13	32°13'16.562"N	104°01'01.198"W	1.52	
14490.00	87.540	87.450	10059.97	4966.70	1112.40	4967.09	597919.67	444364.31	32°13'16.601"N	104°01'00.105"W	1.11	
14584.00	90.250	88.670	10061.79	5060.61	1115.58	5061.00	598013.58	444367.49	32°13'16.629"N	104°00'59.012"W	3.16	
14679.00	89.040	87.610	10062.38	5155.56	1118.66	5155.95	598108.52	444370.57	32°13'16.657"N	104°00'57.907"W	1.69	
14773.00	85.990	87.100	10066.45	5249.36	1123.00	5249.75	598202.31	444374.90	32°13'16.697"N	104°00'56.815"W	3.29	
14828.00	84.410	88.900	10071.05	5304.09	1125.88	5304.48	598257.04	444377.77	32°13'16.724"N	104°00'56.178"W	2.90	6 1/8 BH MWD 10392' - 14828'



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 7 of 9



REFERENCE WELLPATH IDENTIFICATION

Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH DATA (151 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14900.00	84.41	86.90	10078.07	5375.64	1129.74	5376.03	598328.59	444381.64	32°13'16.760"N	104°00'55.345"W	0.00	Projection to TD: 14900'

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Zach McCormick Fed No. 202H FTP rev 1	9914.00	1082.09	636.05	593589.00	444334.00	32°13'16.424"N	104°01'50.520"W	point
Zach McCormick Fed No. 202H 2500' VS IP	9979.47	1081.27	2500.38	595453.17	444333.18	32°13'16.364"N	104°01'28.819"W	point
Zach McCormick Fed No. 202H LTP rev 3	10064.20	1080.09	5266.44	598219.00	444332.00	32°13'16.272"N	104°00'56.622"W	point
Zach McCormick Fed No. 202H PBHL rev 3	10064.20	1080.09	5356.44	598309.00	444332.00	32°13'16.270"N	104°00'55.574"W	rectangle

WELLPATH COMPOSITION - Ref Wellbore: Zach McCormick Fed 18-24S-29E RB No. 202H Ref Wellpath: Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
29.00	426.00	BHI NaviTrak (Standard)	17 1/2 BH MWD 192' - 426'	Zach McCormick Fed 18-24S-29E RB No. 202H
426.00	2684.00	BHI NaviTrak (X Short spacing)	12 1/4 BH MWD 609' - 2684'	Zach McCormick Fed 18-24S-29E RB No. 202H
2684.00	10300.00	BHI NaviTrak (X Short spacing)	8 3/4 BH MWD 2847' - 10300'	Zach McCormick Fed 18-24S-29E RB No. 202H
10300.00	14828.00	BHI NaviTrak (X Short spacing)	6 1/8 BH MWD 10392' - 14828'	Zach McCormick Fed 18-24S-29E RB No. 202H
14828.00	14900.00	Blind Drilling (std)	Projection to bit	Zach McCormick Fed 18-24S-29E RB No. 202H



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'

Page 8 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
426.00	0.320	281.870	426.00	17 1/2 BH MWD 192' - 426'	
2684.00	8.530	13.750	2673.84	12 1/4 BH MWD 609' - 2684'	
10300.00	77.690	85.980	9909.74	8 3/4 BH MWD 2847' - 10300'	
14828.00	84.410	86.900	10071.05	6 1/8 BH MWD 10392' - 14828'	
14900.00	84.410	86.900	10078.07	Projection to TD: 14900'	



Actual Wellpath Report

Zach McCormick Federal Com No. 202H awp 192' - 14828' Proj: 14900'
Page 9 of 9



REFERENCE WELLPATH IDENTIFICATION			
Operator	Matador Resources	Slot	Zach McCormick Fed 18-24S-29E RB No. 202H
Area	Eddy County, NM	Well	Zach McCormick Federal Com No. 202H
Field	Purple Sage; Wolfcamp (Eddy Co., NM)	Wellbore	Zach McCormick Fed 18-24S-29E RB No. 202H
Facility	Zach McCormick Fed 18-24S-29E RB Pad		

COMMENTS	
Wellpath general comments	
Well:	Zach McCormick Federal Com No. 202H
Field:	Purple Sage; Wolfcamp
Rig:	Patterson 297
Location:	Eddy Co., NM
API:	30-015-44254-00
Latitude:	32° 13' 05.734" N
Longitude:	104° 01' 57.959" W
DF Elevation:	2983 feet
Elev. GL:	2954 feet
Proposed Direction:	90.02°
PBHL:	14900 feet
Duration:	6/24/2018-7/14/2018
FSE's:	W. Burge
SO#:	9195370
17 1/2 BH MWD	192' - 426'
12 1/4 BH MWD	609' - 2684'
8 3/4 BH MWD	2847' - 10300'
6 1/8 BH MWD	10392' - 14828'
Projection to TD:	14900'